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: P633051

Luminaire Tested: GWS-SA2D-830-U-T3-W-GRSBK

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:	P633051
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-24)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA2D-830-U-T3-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5727.7 lumens
Efficiency:	N/A
Efficacy:	69.8 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G0

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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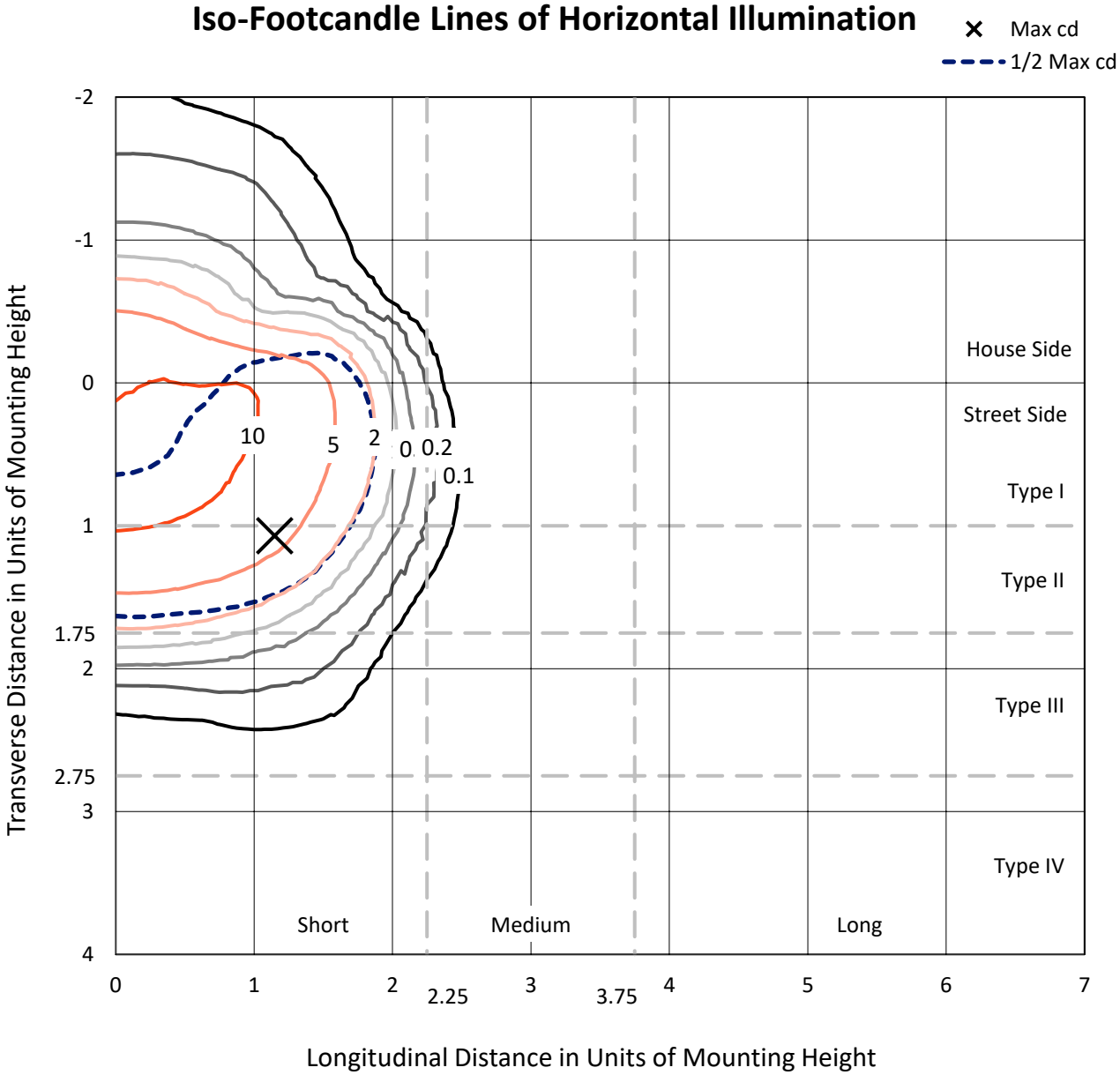
Scaled Data Report

REPORT NUMBER: P633051
CATALOG NUMBER: GWS-SA2D-830-U-T3-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 13.6 fc
Type II - Short - N/A

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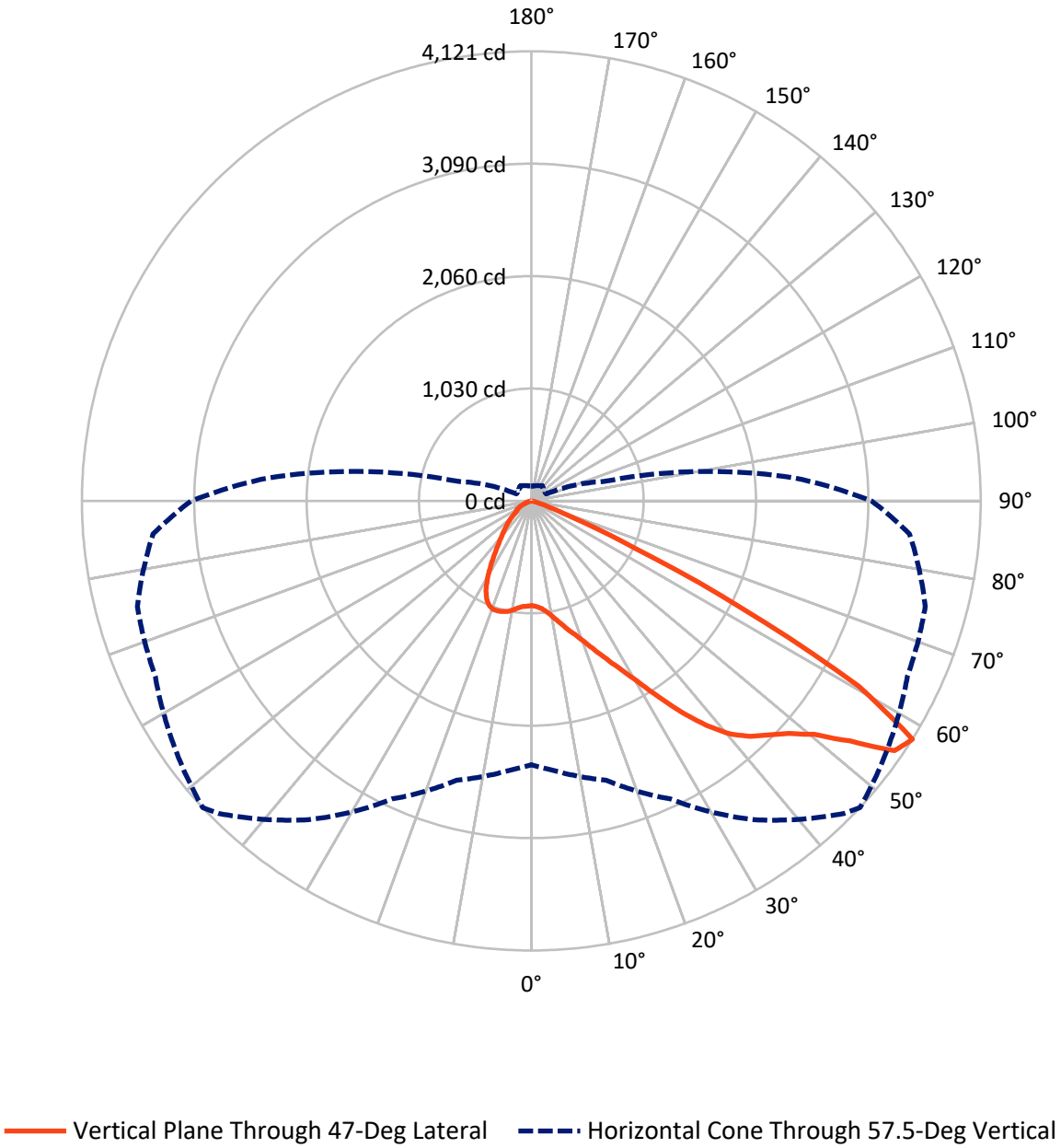
Luminous Intensity Polar Plot



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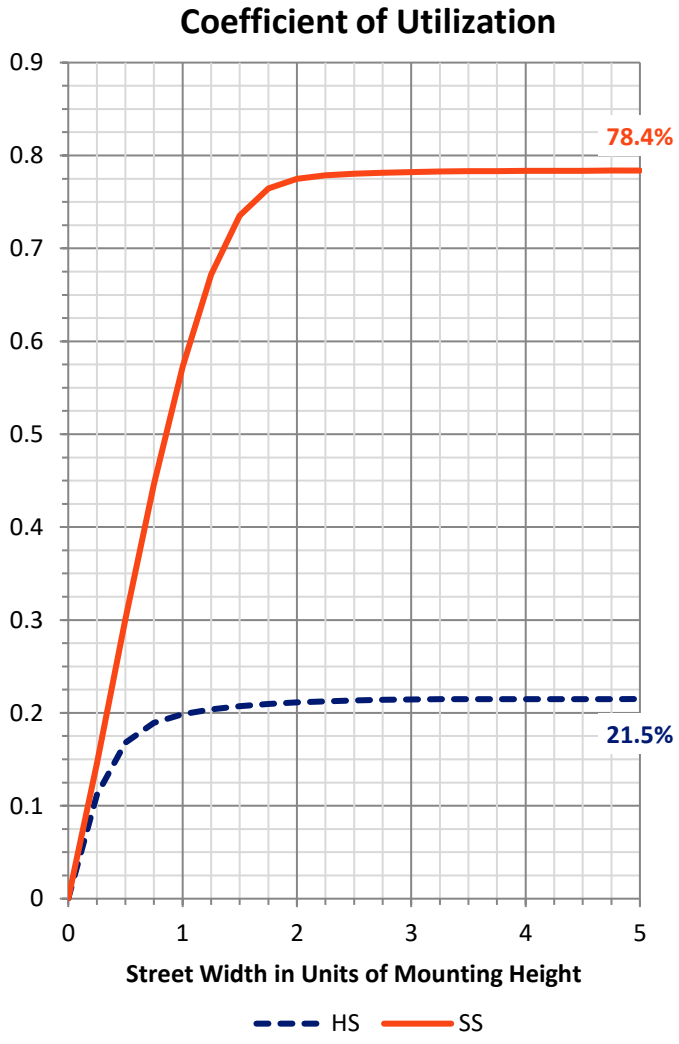
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1242.6	0.0	1242.6
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	4485.1	0.0	4485.1
	% Fixture	78.3	0.0	78.3
Total	Lumens	5727.7	0.0	5727.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	1.7
10°-20°	321.9	5.6
20°-30°	597.6	10.4
30°-40°	956.7	16.7
40°-50°	1398.5	24.4
50°-60°	1726.0	30.1
60°-70°	576.7	10.1
70°-80°	53.7	0.9
80°-90°	1.1	0.0
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°	5727.7	100.0
0°-180°	5727.7	100.0



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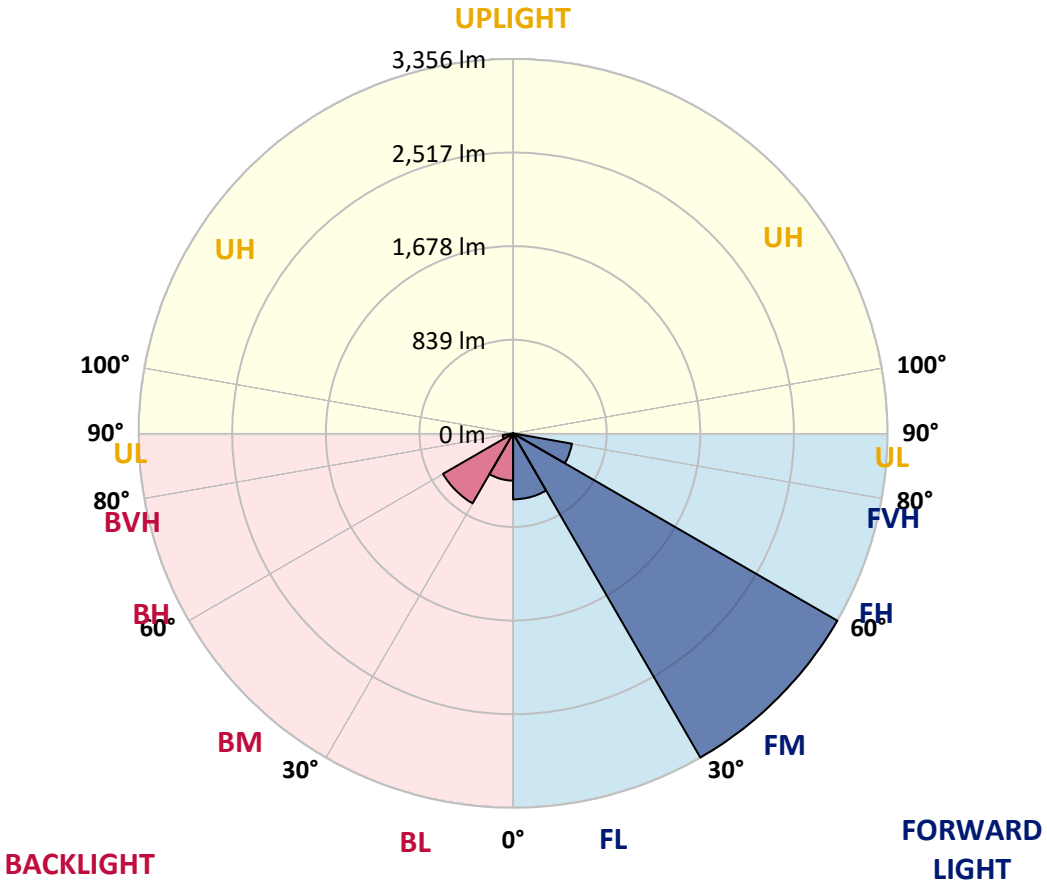
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	591.9	10.3			
FM	(30°-60°)	3356.4	58.6			
FH	(60°-80°)	536.0	9.4			G0/660
FVH	(80°-90°)	0.8	0.0			G0/10
BL	(0°-30°)	423.0	7.4	B1/500		
BM	(30°-60°)	724.8	12.7	B1/1000		
BH	(60°-80°)	94.5	1.6	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: B1-U0-G0
Type II Short



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Scaled Data Report

REPORT NUMBER: P633051
CATALOG NUMBER: GWS-SA2D-830-U-T3-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	958.8	958.8	958.8	958.8	958.8	958.8	*958.8*	958.8	958.8	958.8	958.8
2.5°	968.8	968.1	967.5	971.5	970.1	969.5	*970.8*	970.8	970.8	966.8	958.8
5°	992.1	992.1	991.4	995.4	992.1	990.1	*990.7*	990.7	988.1	980.8	970.8
7.5°	1028.6	1027.3	1026.0	1030.0	1026.6	1026.0	*1027.3*	1023.3	1018.7	1006.7	992.7
10°	1081.2	1081.2	1079.2	1083.2	1080.5	1079.2	*1079.2*	1076.5	1067.9	1049.3	1028.6
12.5°	1153.6	1150.3	1145.7	1142.3	1141.0	1140.3	*1141.0*	1137.0	1127.7	1103.8	1075.2
15°	1232.8	1230.1	1222.8	1217.5	1210.2	1208.8	*1212.8*	1209.5	1200.2	1167.6	1127.0
17.5°	1332.5	1335.8	1317.2	1305.9	1284.6	1283.3	*1284.6*	1290.0	1283.3	1241.4	1182.2
20°	1417.6	1420.3	1406.3	1398.3	1379.1	1370.4	*1373.1*	1381.7	1374.4	1325.2	1242.7
22.5°	1508.7	1512.0	1497.4	1480.8	1472.1	1472.1	*1482.1*	1494.1	1484.1	1419.6	1311.9
25°	1617.8	1620.4	1608.5	1586.5	1571.2	1590.5	*1605.1*	1637.0	1620.4	1532.7	1393.7
27.5°	1742.8	1743.4	1726.1	1703.5	1695.6	1731.5	*1746.1*	1795.3	1788.7	1659.7	1480.1
30°	1876.4	1877.1	1873.1	1857.8	1850.5	1897.7	*1917.6*	1988.8	1984.1	1817.2	1597.8
32.5°	2015.4	2015.4	2022.7	2021.4	2030.0	2107.2	*2139.1*	2220.2	2215.5	2010.1	1744.1
35°	2155.0	2155.7	2168.3	2200.2	2236.1	2338.5	*2380.4*	2478.8	2468.2	2240.8	1930.9
37.5°	2313.9	2307.3	2324.6	2372.5	2452.2	2570.6	*2610.5*	2704.3	2692.3	2476.8	2175.0
40°	2505.4	2493.5	2493.5	2549.3	2639.8	2776.1	*2810.0*	2856.5	2816.0	2667.7	2414.3
42.5°	2716.9	2705.6	2691.0	2740.2	2816.0	2922.3	*2950.3*	2937.6	2904.4	2847.9	2687.0
45°	2931.0	2913.7	2923.7	2953.6	2997.5	3048.0	*3058.7*	3000.1	2984.9	3000.8	2912.4
47.5°	3093.9	3081.9	3106.5	3148.4	3184.3	3191.6	*3184.3*	3103.2	3101.9	3158.4	3068.6
50°	3148.4	3149.8	3217.6	3309.3	3367.2	3373.2	*3363.2*	3270.1	3257.5	3274.1	3153.1
52.5°	3153.7	3159.1	3258.1	3433.0	3590.6	3662.4	*3654.4*	3554.0	3430.4	3412.4	3280.7
55°	3025.4	3056.7	3195.0	3450.3	3785.4	4014.8	*4041.4*	3849.3	3665.7	3650.4	3555.4
57.5°	*2418.3*	*2482.2*	*2649.1*	*3012.8*	*3568.0*	*4051.4*	*4120.5*	*3982.2*	*3804.7*	*3739.5*	*3481.6*
60°	1445.5	1524.7	1684.9	2131.1	2715.6	3329.9	*3449.0*	3468.3	3386.5	3198.3	2671.0
62.5°	620.4	613.7	811.2	1153.0	1615.1	2116.5	*2170.3*	2254.1	2325.2	2128.4	1621.1
65°	212.8	231.4	321.8	520.0	808.5	982.8	*1030.6*	1105.8	1206.8	996.1	593.8
67.5°	131.7	139.6	185.5	307.2	436.2	429.5	*408.3*	396.3	385.7	264.0	162.9
70°	95.7	102.4	130.3	211.4	293.2	206.1	*178.9*	145.0	160.9	148.3	115.7
72.5°	64.5	69.8	89.8	128.3	150.3	100.4	*93.1*	105.7	127.7	121.7	94.4
75°	38.6	41.9	51.2	62.5	61.2	51.9	*52.5*	74.5	97.7	91.1	67.2
77.5°	26.6	27.9	33.9	40.6	29.9	16.0	*14.6*	20.6	33.2	33.2	22.6
80°	6.6	8.6	8.6	5.3	4.7	4.0	*4.0*	6.0	9.3	6.6	3.3
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	*0.7*	1.3	1.3	1.3	1.3
85°	0.0	0.0	0.7	0.7	0.7	0.7	*0.7*	0.7	1.3	1.3	1.3
87.5°	0.0	0.0	0.7	0.7	0.7	0.7	*0.7*	0.7	0.7	1.3	1.3
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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REPORT NUMBER: P633051
CATALOG NUMBER: GWS-SA2D-830-U-T3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8
2.5°	963.5	955.5	960.8	959.5	963.5	964.8	958.8	957.5	958.2	950.2	947.5
5°	972.8	963.5	966.1	963.5	968.1	972.1	970.1	972.8	976.1	970.1	967.5
7.5°	992.7	983.4	982.8	978.8	985.4	988.1	987.4	994.7	1001.4	997.4	993.4
10°	1027.3	1014.7	1013.3	1010.0	1012.0	1014.0	1006.7	1008.0	1014.0	1009.4	1007.4
12.5°	1069.9	1054.6	1051.2	1043.3	1043.3	1033.3	1017.3	1014.0	1018.7	1015.3	1012.0
15°	1115.7	1095.1	1089.8	1075.9	1062.6	1043.9	1027.3	1023.3	1026.6	1022.7	1020.0
17.5°	1166.9	1143.7	1126.4	1101.8	1072.5	1050.6	1032.0	1023.3	1018.0	1010.0	1009.4
20°	1217.5	1186.9	1157.6	1118.4	1079.8	1046.6	1016.0	993.4	974.1	962.1	957.5
22.5°	1276.0	1230.8	1183.6	1128.4	1073.2	1022.7	968.8	930.2	897.0	885.7	880.4
25°	1338.5	1280.0	1209.5	1137.7	1050.6	969.5	896.3	839.1	795.3	780.6	774.6
27.5°	1407.6	1327.2	1236.1	1135.7	1004.0	893.7	796.6	725.4	682.2	668.9	673.6
30°	1495.4	1388.4	1269.3	1115.1	934.2	787.3	673.6	613.7	581.1	568.5	569.2
32.5°	1612.4	1476.1	1317.9	1071.2	844.5	666.3	566.5	522.6	500.7	484.1	482.7
35°	1780.0	1609.8	1363.1	1000.7	735.4	558.5	486.1	451.5	420.9	401.6	404.9
37.5°	1980.8	1778.0	1387.7	905.6	613.1	474.8	425.6	390.3	355.7	327.1	330.5
40°	2218.9	1998.1	1385.7	780.6	501.4	417.6	375.0	333.8	290.6	264.6	267.3
42.5°	2484.2	2206.2	1342.5	648.3	415.6	371.0	326.5	274.6	232.7	216.8	217.4
45°	2714.2	2375.1	1266.7	511.3	349.8	325.8	275.9	222.8	204.1	192.8	192.2
47.5°	2884.4	2498.8	1158.3	402.3	296.6	284.6	226.7	199.5	184.8	175.5	174.2
50°	2979.5	2542.0	1038.6	315.2	250.7	241.4	202.8	180.9	170.9	164.9	163.6
52.5°	3107.2	2593.9	952.8	248.7	210.1	197.5	186.8	168.2	161.6	156.9	154.9
55°	3309.3	2694.3	878.4	197.5	174.9	172.2	176.2	160.9	156.9	149.6	146.9
57.5°	*3119.2*	*2420.3*	*682.2*	*152.9*	*147.6*	*157.6*	*170.2*	*153.6*	*143.6*	*137.0*	*134.3*
60°	2194.9	1609.1	343.1	123.0	131.7	147.6	160.2	139.0	129.0	130.3	129.0
62.5°	1210.2	805.2	154.3	103.1	114.4	130.3	137.0	120.4	113.7	125.0	127.0
65°	395.6	273.9	89.1	79.8	90.4	106.4	118.4	114.4	113.0	126.3	130.3
67.5°	121.7	90.4	60.5	57.2	62.5	78.5	99.7	123.7	133.0	137.0	139.0
70°	91.1	71.1	51.9	48.5	51.2	59.8	84.4	103.1	97.1	97.7	96.4
72.5°	73.1	56.5	44.6	42.6	42.6	41.2	44.6	55.9	63.2	66.5	66.5
75°	51.2	39.9	33.9	31.3	24.6	19.9	18.0	18.0	16.0	15.3	14.6
77.5°	17.3	14.6	13.3	10.6	7.3	6.0	5.3	4.7	3.3	2.0	1.3
80°	2.7	2.0	1.3	1.3	1.3	0.7	0.7	0.7	0.0	0.0	0.0
82.5°	1.3	1.3	1.3	1.3	1.3	0.7	0.7	0.0	0.0	0.0	0.0
85°	1.3	1.3	1.3	1.3	1.3	0.7	0.7	0.0	0.0	0.0	0.0
87.5°	1.3	1.3	1.3	1.3	0.7	0.7	0.7	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

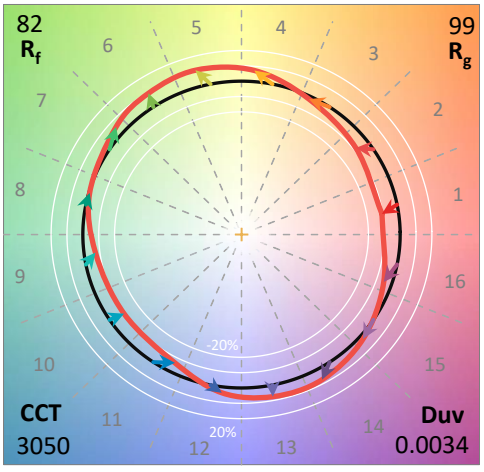
Test Information

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

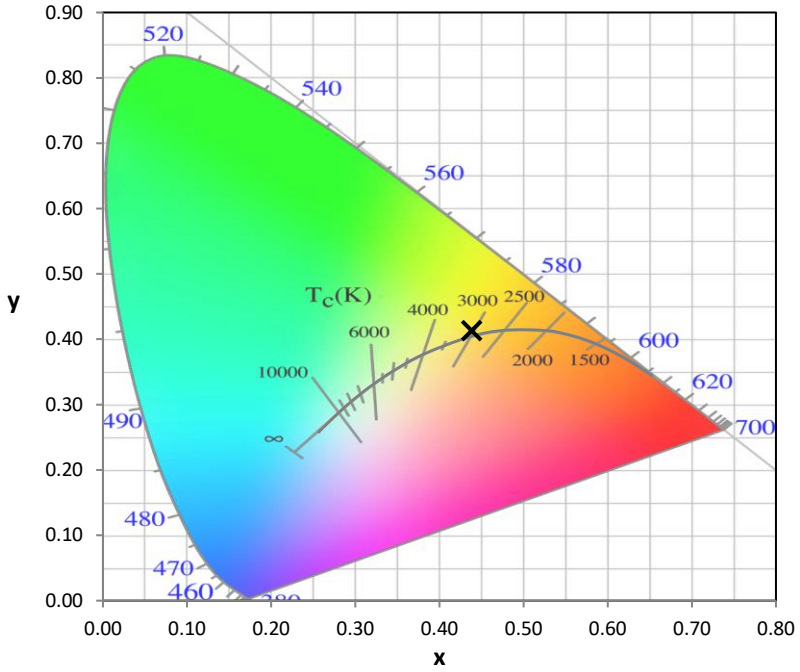
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

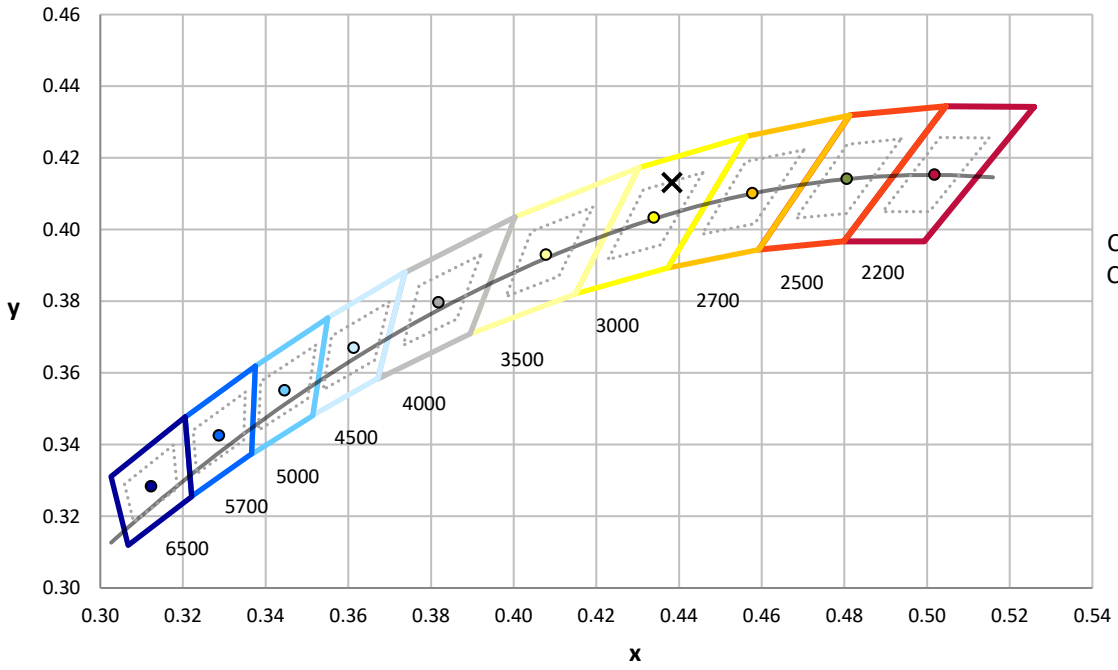
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

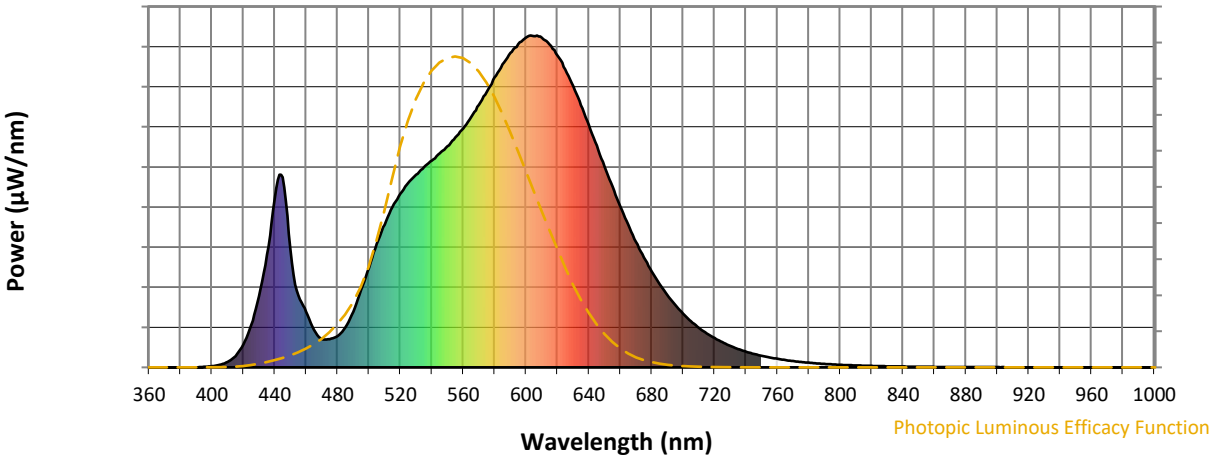


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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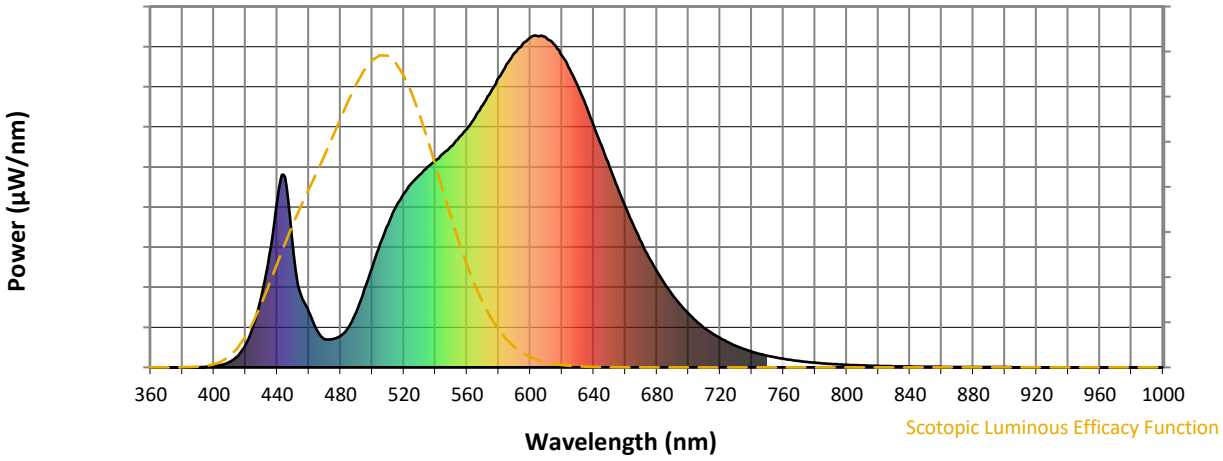
Scotopic Flux vs. Wavelength



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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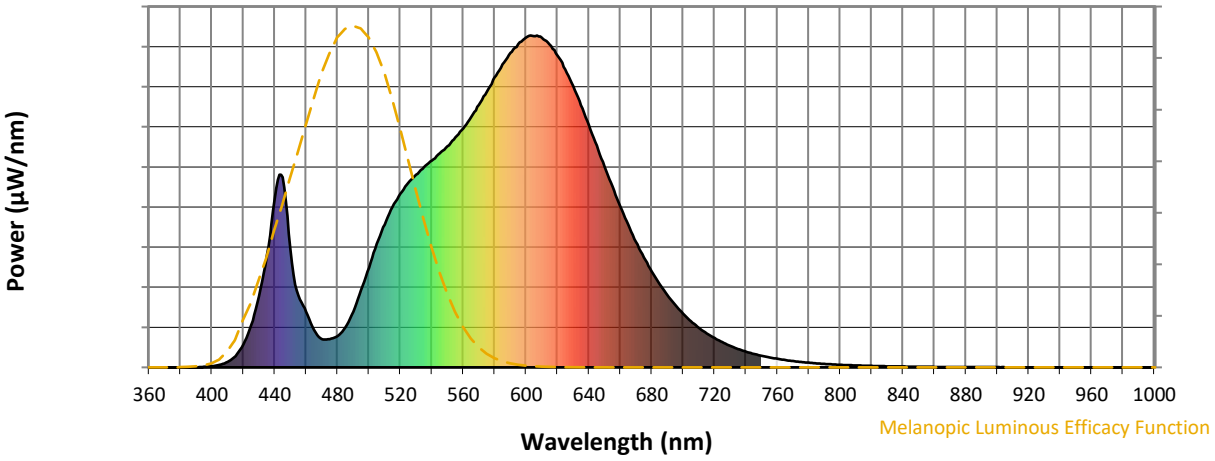
Melanopic Flux vs. Wavelength



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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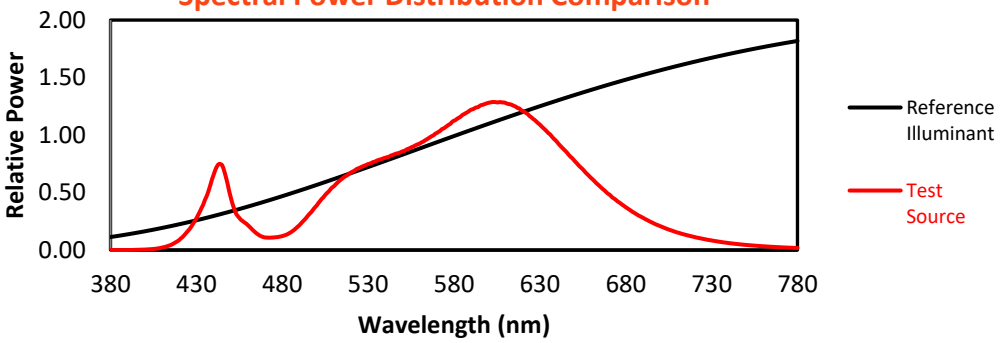
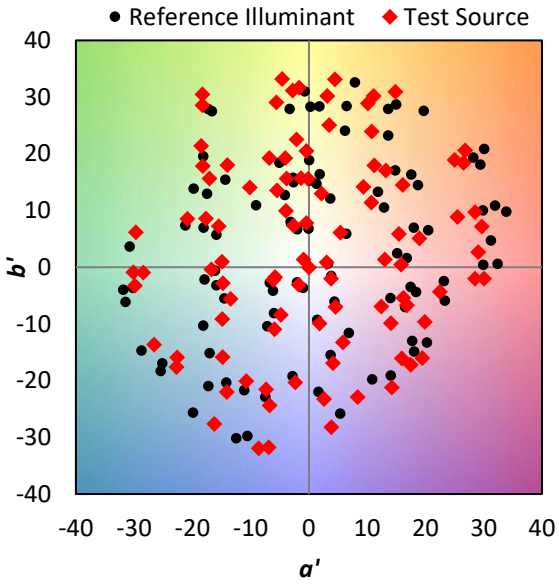
Summary

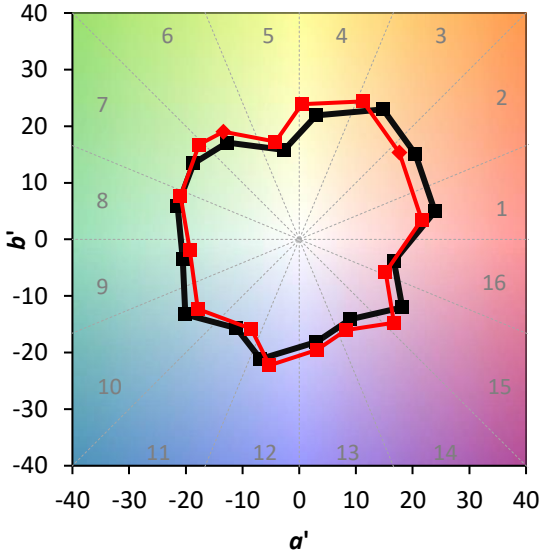
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

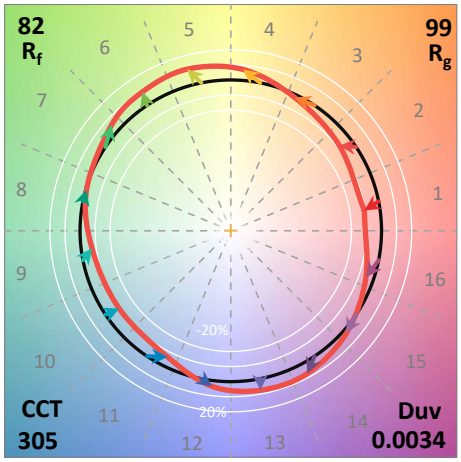
Spectral Power Distribution Comparison

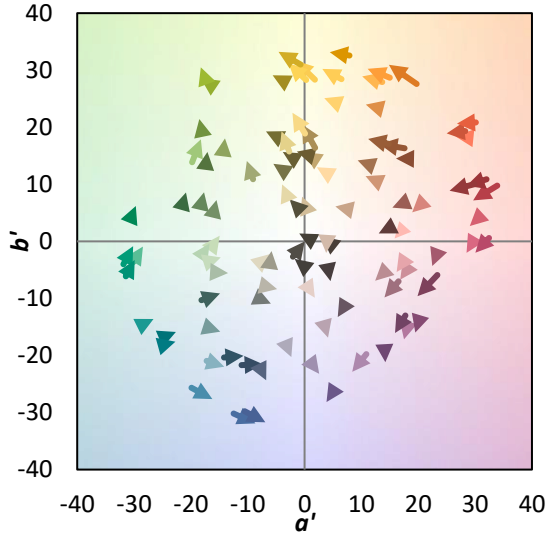


Color Vector Graphics









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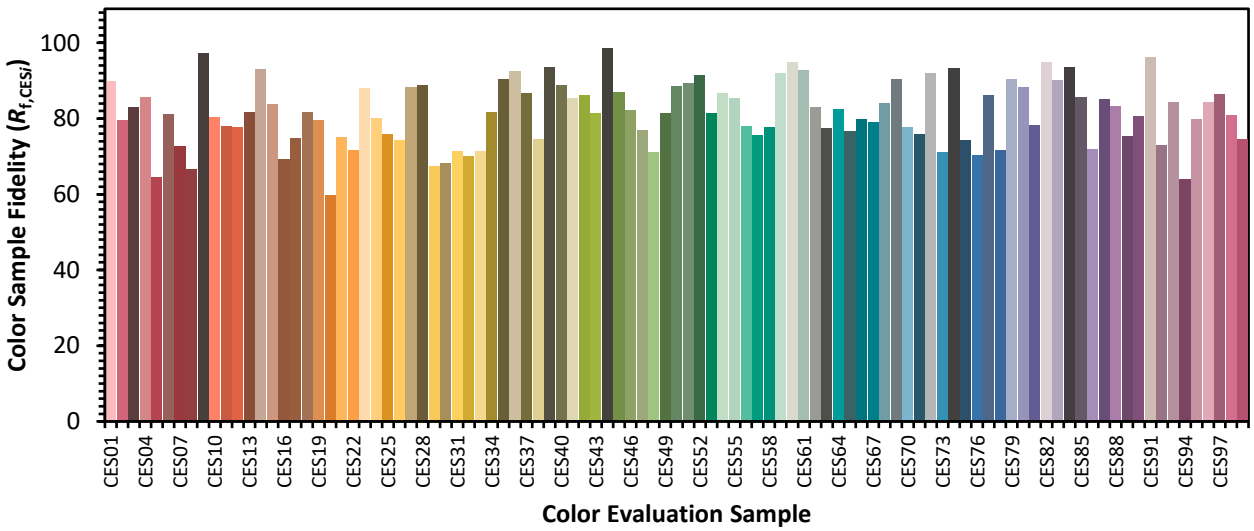
Individual Sample Fidelity Index ($R_{f,i}$)

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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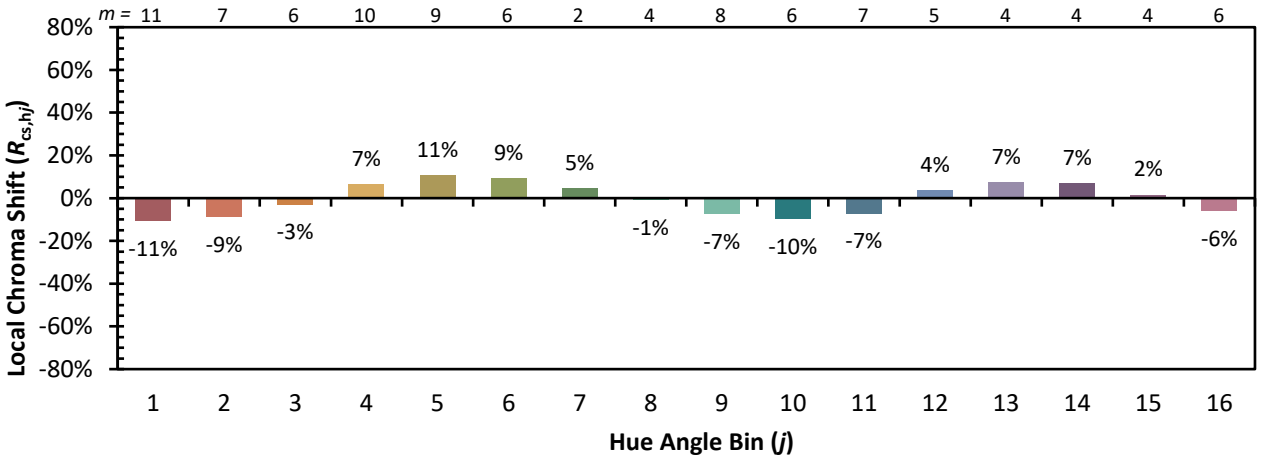
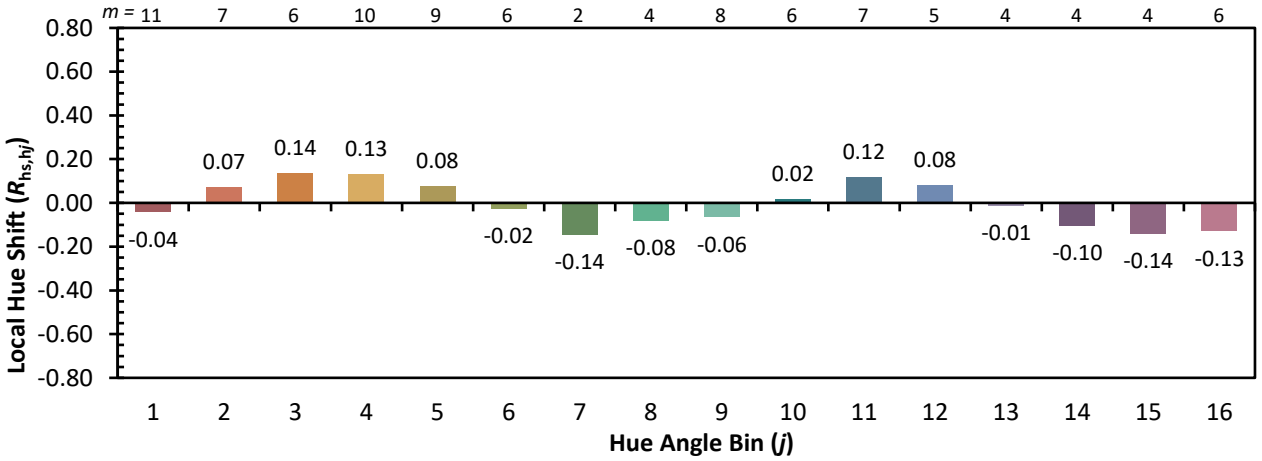
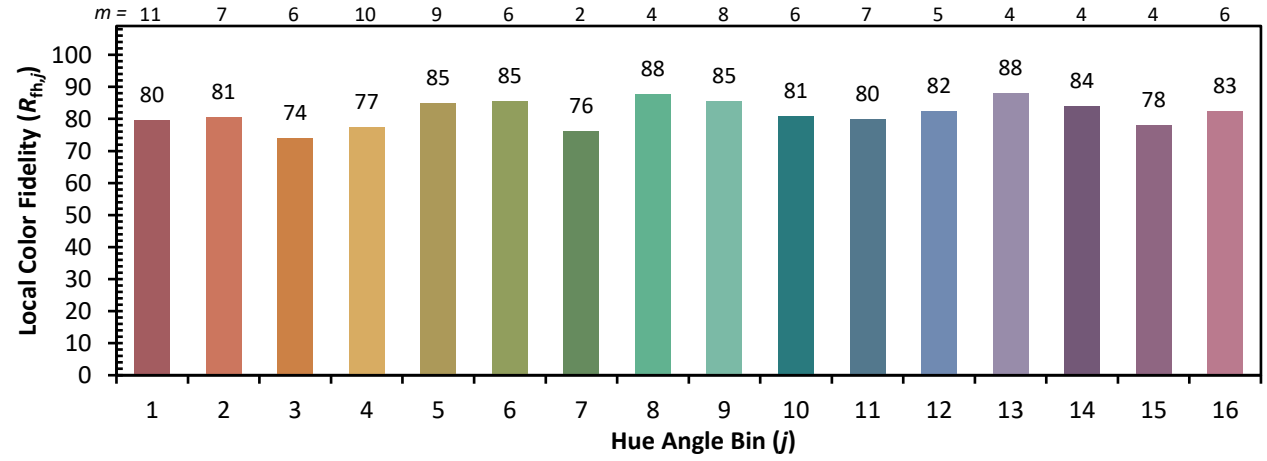
Color Rendition by Hue-Angle Bin







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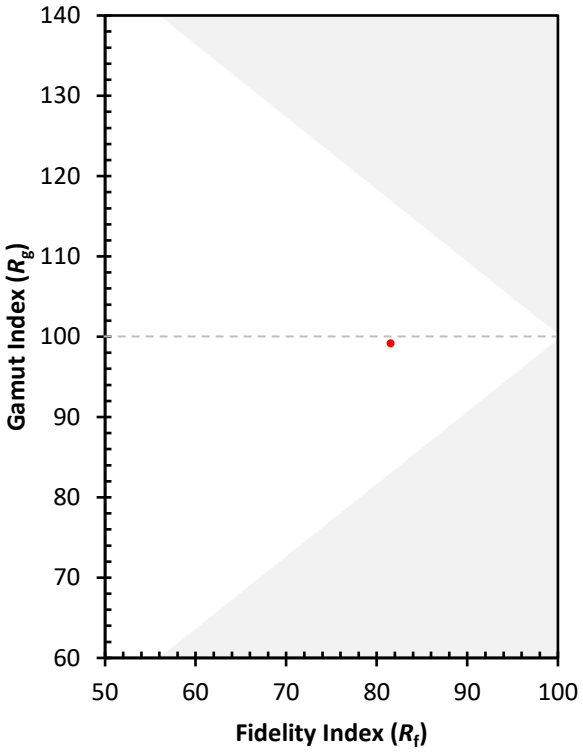
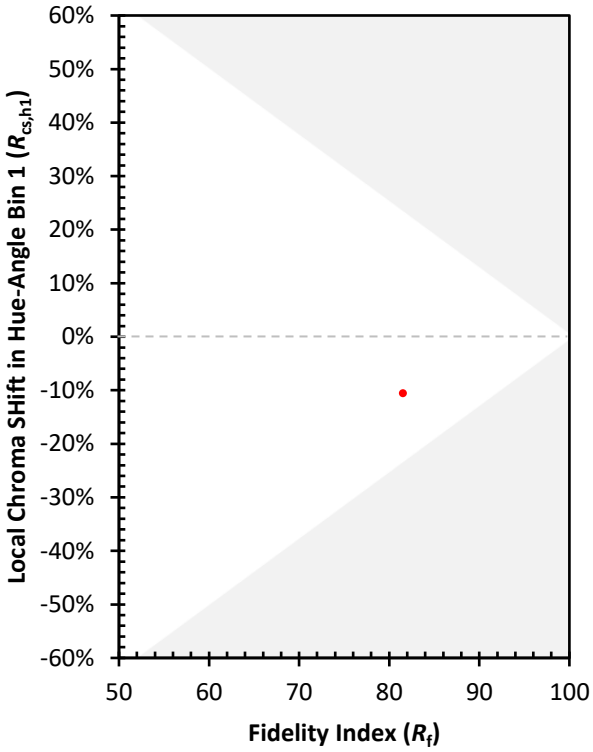
Measure Comparisons





(END OF REPORT)