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: P636981

Luminaire Tested: GWS-SA4B-830-U-RW-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:	P636981
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-50)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4B-830-U-RW-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	7452.3 lumens
Efficiency:	N/A
Efficacy:	78.9 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type V - Short
BUG Rating:	B3 - U0 - G0

Input Watts (W):	94.4
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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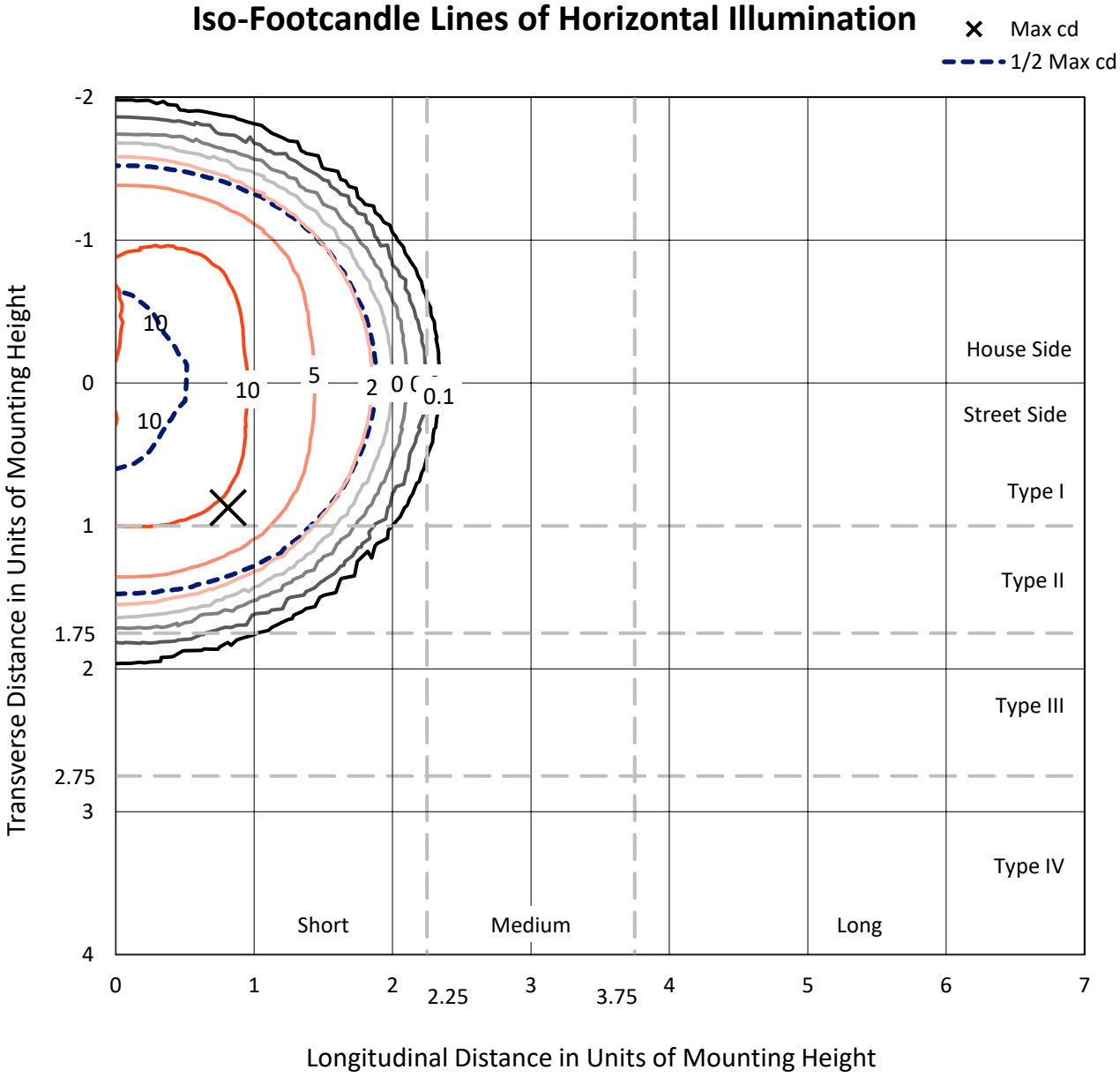
REPORT NUMBER: P636981
CATALOG NUMBER: GWS-SA4B-830-U-RW-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 12.7 fc
Type V - Short - N/A

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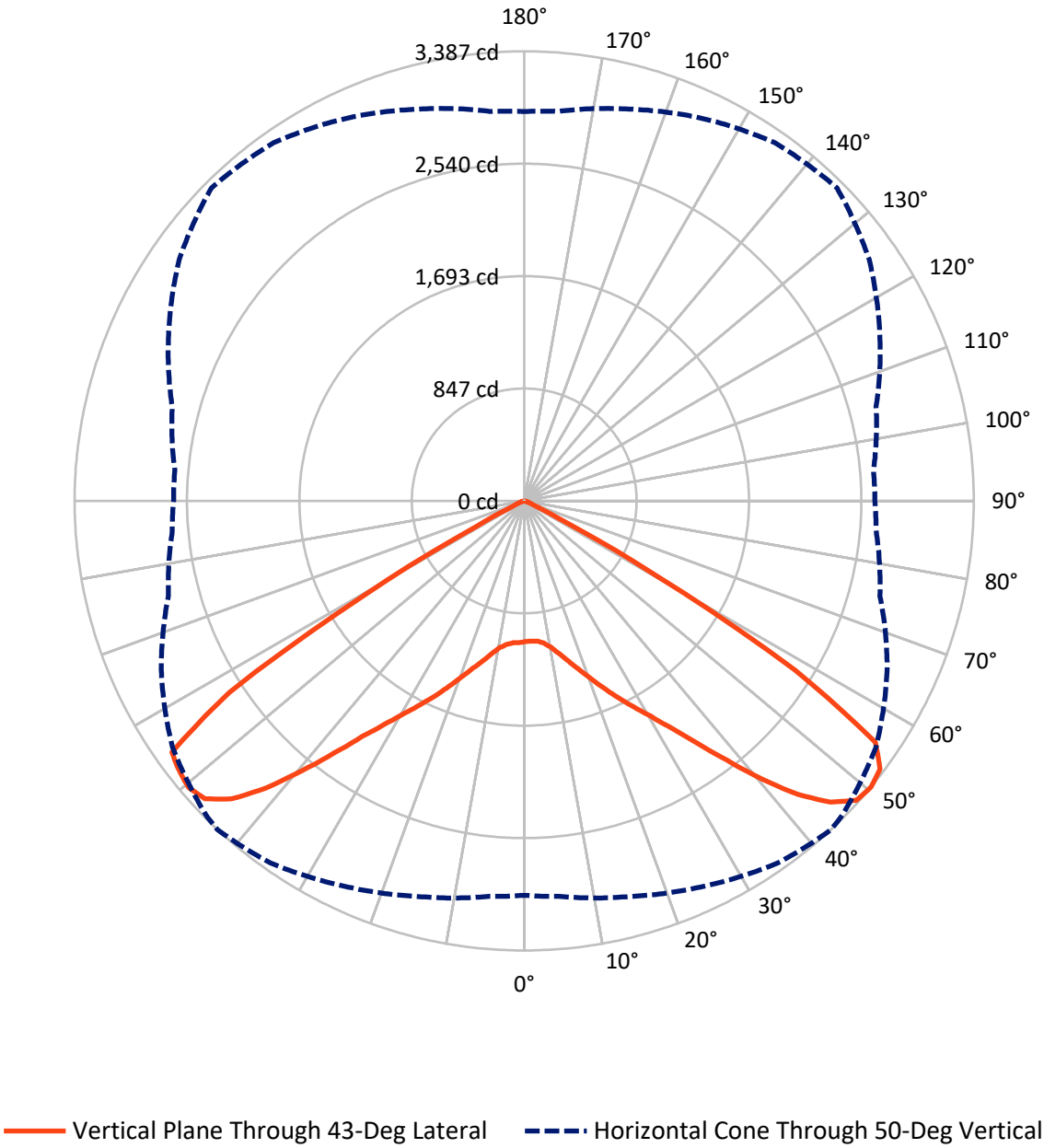
Luminous Intensity Polar Plot



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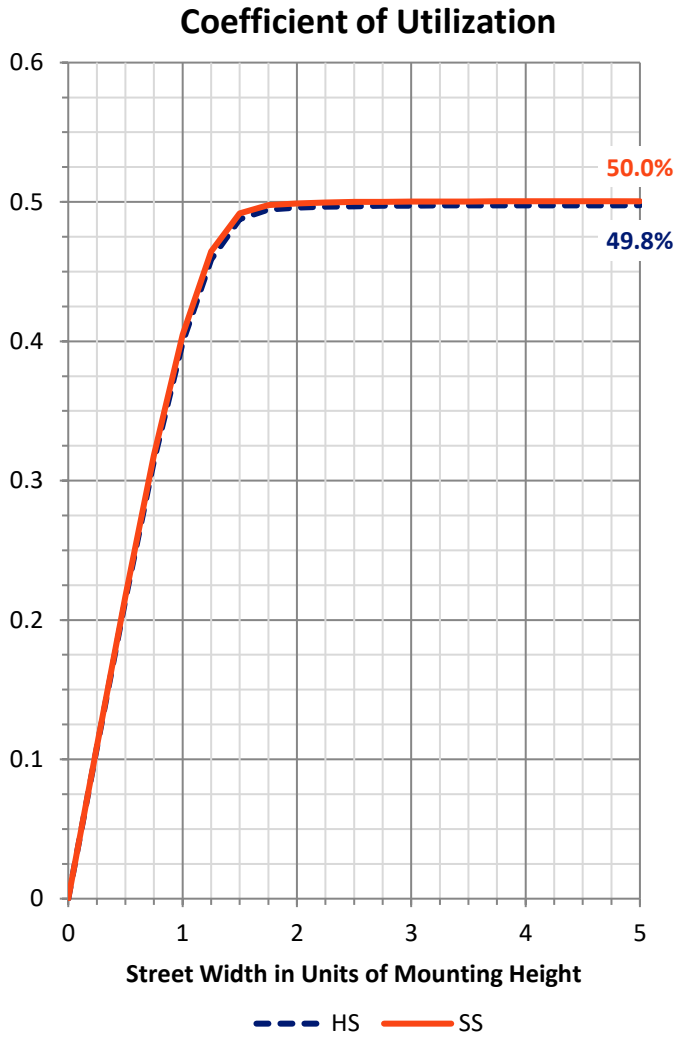
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3726.1	0.0	3726.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3726.2	0.0	3726.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	7452.3	0.0	7452.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	1.4
10°-20°	359.2	4.8
20°-30°	726.7	9.8
30°-40°	1348.4	18.1
40°-50°	2238.2	30.0
50°-60°	2284.2	30.7
60°-70°	374.6	5.0
70°-80°	16.4	0.2
80°-90°	0.2	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°	7452.3	100.0
0°-180°	7452.3	100.0



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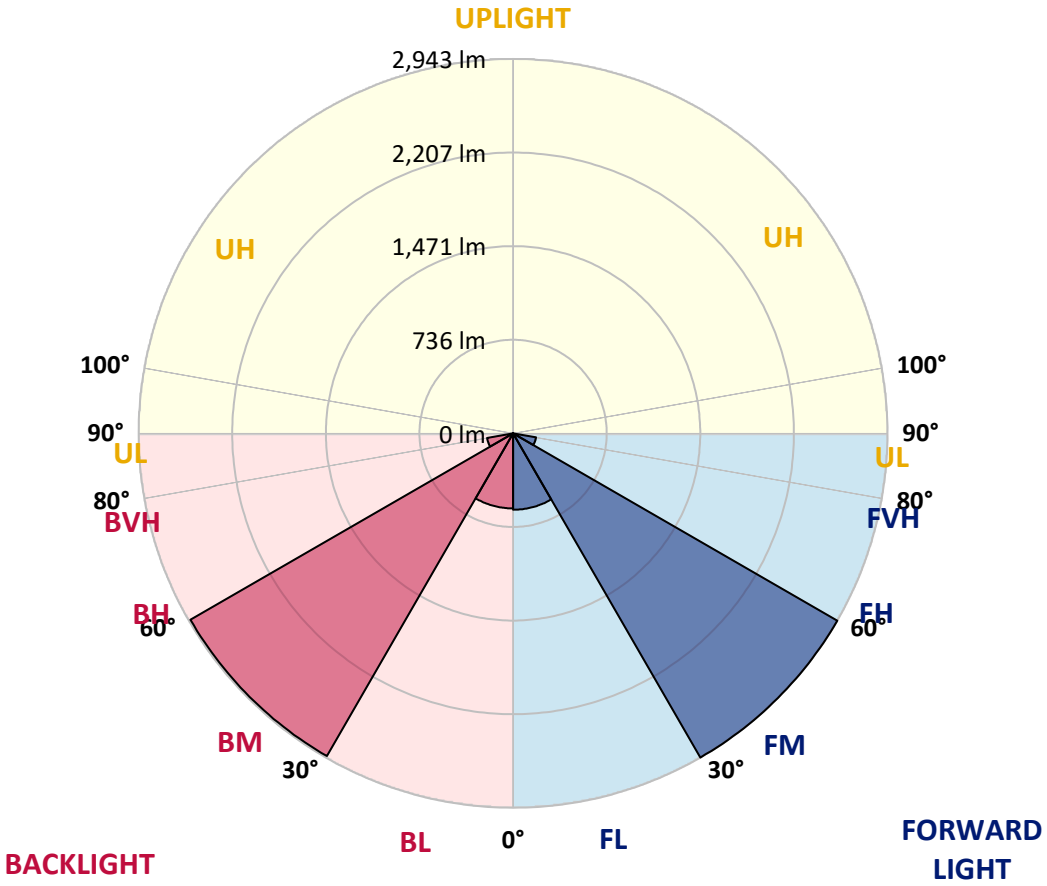
REPORT NUMBER: P636981
CATALOG NUMBER: GWS-SA4B-830-U-RW-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	600.4	8.1			
FM	(30°-60°)	2942.5	39.5			
FH	(60°-80°)	183.3	2.5			G0/660
FVH	(80°-90°)	0.1	0.0			G0/10
BL	(0°-30°)	590.0	7.9	B2/1000		
BM	(30°-60°)	2928.2	39.3	B3/5000		
BH	(60°-80°)	207.7	2.8	B1/500		G0/660
BVH	(80°-90°)	0.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G0
Type V Short



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REPORT NUMBER: P636981
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	1060.0	1060.0	1060.0	1060.0	1060.0	*1060.0*	1060.0	1060.0	1060.0	1060.0	1060.0
2.5°	1040.2	1042.7	1046.0	1049.3	1053.4	*1057.5*	1060.0	1067.4	1065.7	1072.3	1072.3
5°	1028.7	1031.1	1035.2	1042.7	1051.7	*1060.8*	1067.4	1082.2	1090.5	1103.7	1108.6
7.5°	1034.4	1037.7	1042.7	1054.2	1068.2	*1082.2*	1089.6	1113.5	1130.0	1154.8	1168.8
10°	1053.4	1056.7	1064.9	1084.7	1102.8	*1122.6*	1131.7	1162.2	1188.6	1222.3	1242.1
12.5°	1074.8	1078.9	1095.4	1125.1	1156.4	*1182.8*	1195.1	1228.9	1256.1	1294.1	1325.4
15°	1097.1	1103.7	1129.2	1172.9	1217.4	*1252.8*	1266.0	1302.3	1329.5	1369.9	1405.3
17.5°	1149.0	1156.4	1185.3	1232.2	1293.2	*1334.4*	1346.0	1383.9	1404.5	1431.7	1468.8
20°	1214.1	1228.1	1263.6	1320.4	1387.2	*1426.8*	1435.0	1472.1	1470.4	1482.0	1514.1
22.5°	1294.9	1304.8	1343.5	1411.1	1486.1	*1529.8*	1548.7	1564.4	1543.8	1533.9	1554.5
25°	1379.0	1390.5	1432.5	1506.7	1590.8	*1641.1*	1656.7	1669.1	1636.1	1599.0	1601.5
27.5°	1487.8	1496.0	1537.2	1616.3	1700.4	*1757.3*	1771.3	1792.7	1749.0	1689.7	1673.2
30°	1617.2	1625.4	1669.1	1752.3	1835.6	*1884.2*	1905.6	1932.0	1884.2	1810.0	1791.1
32.5°	1768.8	1777.1	1833.1	1918.8	1987.2	*2040.0*	2060.6	2088.6	2050.7	1967.5	1946.0
35°	1950.2	1955.1	2021.0	2114.2	2186.7	*2237.8*	2251.8	2284.8	2242.8	2159.5	2148.0
37.5°	2160.3	2166.1	2237.8	2345.8	2420.0	*2476.8*	2499.1	2508.2	2457.1	2363.9	2354.9
40°	2391.1	2410.1	2480.1	2596.4	2679.6	*2751.3*	2771.1	2740.6	2668.9	2542.0	2525.5
42.5°	2631.8	2648.3	2726.6	2852.7	2949.1	*3022.5*	3023.3	2957.4	2835.4	2659.8	2635.1
45°	2832.1	2838.7	2940.1	3067.0	3185.7	*3237.6*	3242.6	3123.0	2939.2	2728.2	2675.5
47.5°	2969.7	2980.4	3068.6	3190.6	3321.7	*3368.7*	3358.8	3209.6	2988.7	2772.7	2685.4
50°	*2971.4*	*2989.5*	*3085.1*	*3203.0*	*3329.9*	*3386.8*	*3372.8*	*3234.3*	*3016.7*	*2774.4*	*2661.5*
52.5°	2708.5	2738.1	2893.9	3064.5	3259.0	*3356.3*	3359.6	3266.5	3006.0	2748.0	2640.0
55°	2043.3	2075.4	2271.6	2562.6	2938.4	*3209.6*	3256.6	3228.5	2993.6	2759.6	2678.0
57.5°	1081.4	1056.7	1165.5	1454.0	1926.2	*2406.0*	2543.6	2767.8	2856.0	2773.6	2748.0
60°	235.7	251.4	334.6	450.9	751.7	*1131.7*	1266.0	1650.1	2106.8	2309.5	2456.2
62.5°	101.4	99.7	103.9	117.9	172.3	*286.8*	350.3	572.0	902.5	1239.7	1468.0
65°	83.2	84.1	87.4	87.4	81.6	*82.4*	86.5	131.1	211.0	295.9	397.3
67.5°	62.6	63.5	69.2	70.9	66.8	*59.3*	58.5	49.5	51.9	65.1	67.6
70°	39.6	39.6	42.9	44.5	44.5	*41.2*	40.4	35.4	34.6	39.6	44.5
72.5°	21.4	21.4	23.1	23.9	23.1	*22.3*	22.3	21.4	20.6	23.9	30.5
75°	9.1	9.1	9.9	9.9	9.1	*9.1*	9.1	9.1	9.1	10.7	16.5
77.5°	1.6	2.5	3.3	2.5	1.6	*1.6*	1.6	2.5	2.5	3.3	4.9
80°	0.8	0.8	1.6	0.8	0.0	*0.0*	0.0	0.0	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0	0.8
85°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	*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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Scaled Data Report

REPORT NUMBER: P636981
CATALOG NUMBER: GWS-SA4B-830-U-RW-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1060.0	1060.0	1060.0	1060.0	1060.0	1060.0	1060.0	1060.0	1060.0	1060.0	1060.0
2.5°	1078.1	1069.0	1072.3	1074.0	1071.5	1069.9	1060.8	1058.3	1054.2	1047.6	1046.0
5°	1114.4	1107.0	1106.1	1101.2	1089.6	1075.6	1058.3	1050.9	1042.7	1034.4	1032.8
7.5°	1175.4	1166.3	1160.5	1144.0	1117.7	1095.4	1066.6	1050.9	1040.2	1029.5	1027.0
10°	1253.7	1243.0	1226.5	1196.0	1160.5	1128.4	1094.6	1074.0	1057.5	1042.7	1041.8
12.5°	1336.9	1325.4	1295.7	1257.0	1214.1	1184.4	1141.6	1112.7	1088.0	1065.7	1063.3
15°	1424.3	1410.3	1369.9	1323.7	1284.2	1253.7	1206.7	1160.5	1122.6	1090.5	1087.2
17.5°	1491.0	1473.7	1425.9	1391.3	1359.2	1327.8	1275.1	1214.1	1163.8	1125.1	1116.0
20°	1533.1	1516.6	1471.3	1452.3	1437.5	1415.2	1352.6	1289.1	1233.1	1185.3	1177.0
22.5°	1573.5	1553.7	1514.1	1514.1	1525.7	1516.6	1449.0	1376.5	1310.5	1255.3	1243.0
25°	1618.8	1603.1	1575.1	1598.2	1627.0	1626.2	1557.0	1466.3	1390.5	1328.7	1316.3
27.5°	1684.7	1669.1	1659.2	1702.9	1739.1	1736.7	1660.8	1562.8	1482.8	1421.8	1410.3
30°	1801.0	1786.1	1775.4	1828.2	1874.3	1857.0	1773.8	1679.0	1598.2	1529.0	1520.7
32.5°	1955.9	1940.3	1926.2	1979.0	2020.2	1998.0	1918.8	1829.8	1736.7	1669.1	1652.6
35°	2159.5	2126.5	2112.5	2175.2	2192.5	2167.7	2091.9	2013.6	1914.7	1837.2	1826.5
37.5°	2369.7	2330.9	2321.1	2375.5	2403.5	2394.4	2305.4	2223.8	2116.6	2030.9	2018.6
40°	2549.4	2513.9	2496.6	2581.5	2645.0	2650.8	2570.8	2471.1	2345.0	2255.9	2233.7
42.5°	2654.9	2624.4	2620.3	2752.1	2856.0	2930.2	2834.6	2731.5	2598.8	2498.3	2480.1
45°	2678.8	2659.0	2693.6	2866.7	3028.3	3163.4	3081.8	2973.0	2829.6	2723.3	2706.0
47.5°	2676.3	2669.7	2731.5	2926.0	3130.5	3297.0	3256.6	3133.8	2995.3	2884.0	2867.5
50°	*2640.9*	*2641.7*	*2744.7*	*2955.7*	*3171.7*	*3333.2*	*3292.8*	*3179.1*	*3055.5*	*2945.8*	*2932.6*
52.5°	2626.9	2621.9	2720.0	2946.7	3213.7	3316.7	3226.1	3098.3	2960.7	2825.5	2805.7
55°	2676.3	2663.9	2723.3	2939.2	3218.7	3307.7	3068.6	2791.7	2509.8	2349.9	2336.7
57.5°	2750.5	2737.3	2765.3	2884.8	2960.7	2750.5	2258.4	1811.7	1521.5	1398.7	1345.2
60°	2456.2	2447.2	2425.7	2281.5	1956.7	1476.2	1005.6	641.3	460.7	372.6	372.6
62.5°	1524.0	1511.7	1395.4	1036.9	753.4	436.0	239.9	150.0	113.7	106.3	105.5
65°	427.8	425.3	352.0	248.9	158.3	98.1	86.5	88.2	86.5	84.1	83.2
67.5°	64.3	70.9	70.9	57.7	55.2	61.8	72.5	77.5	73.4	69.2	67.6
70°	41.2	44.5	42.9	37.1	39.6	46.2	51.9	52.8	50.3	46.2	45.3
72.5°	28.8	32.1	26.4	23.9	24.7	27.2	29.7	29.7	28.8	27.2	25.6
75°	17.3	17.3	12.4	11.5	11.5	12.4	12.4	14.0	14.0	13.2	12.4
77.5°	5.8	6.6	4.1	3.3	3.3	3.3	4.1	4.9	4.9	4.1	3.3
80°	0.8	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	0.8
82.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	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

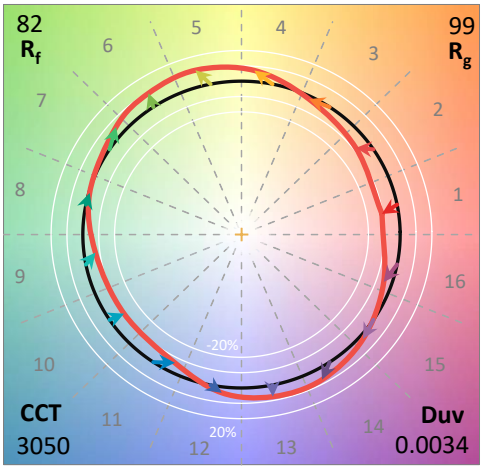
Test Information

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

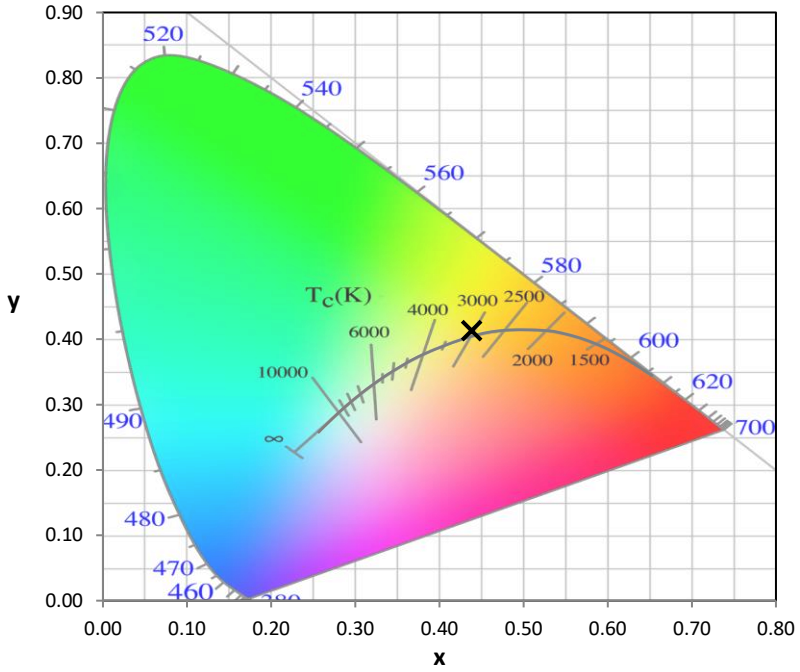
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

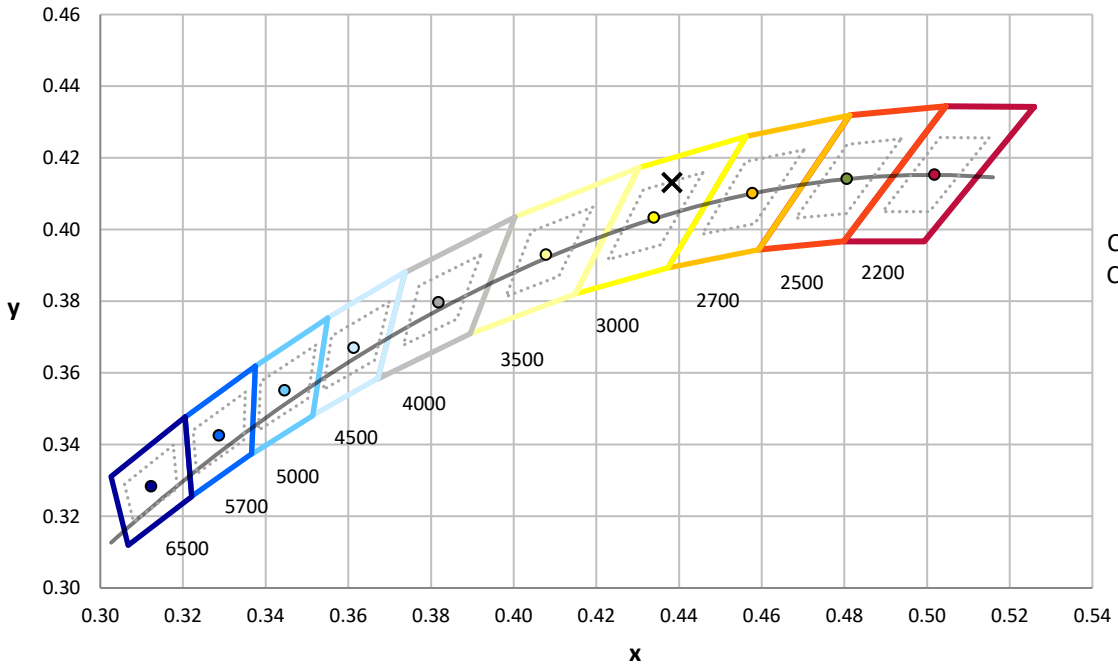
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

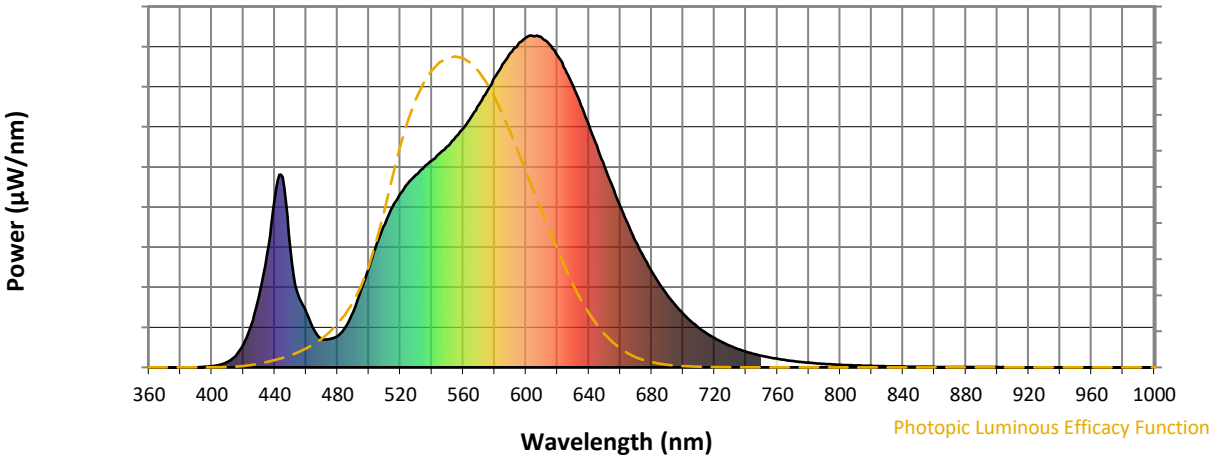


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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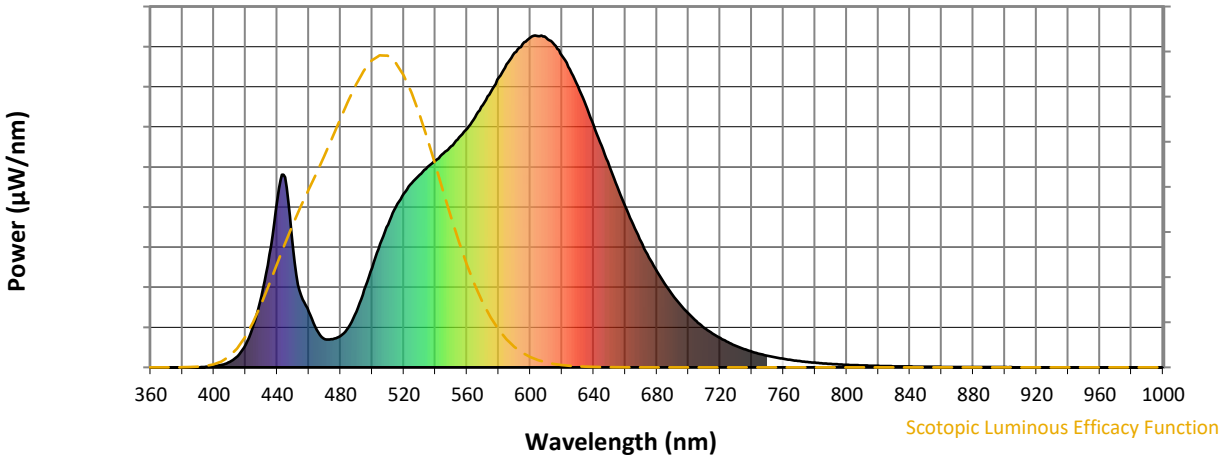
Scotopic Flux vs. Wavelength



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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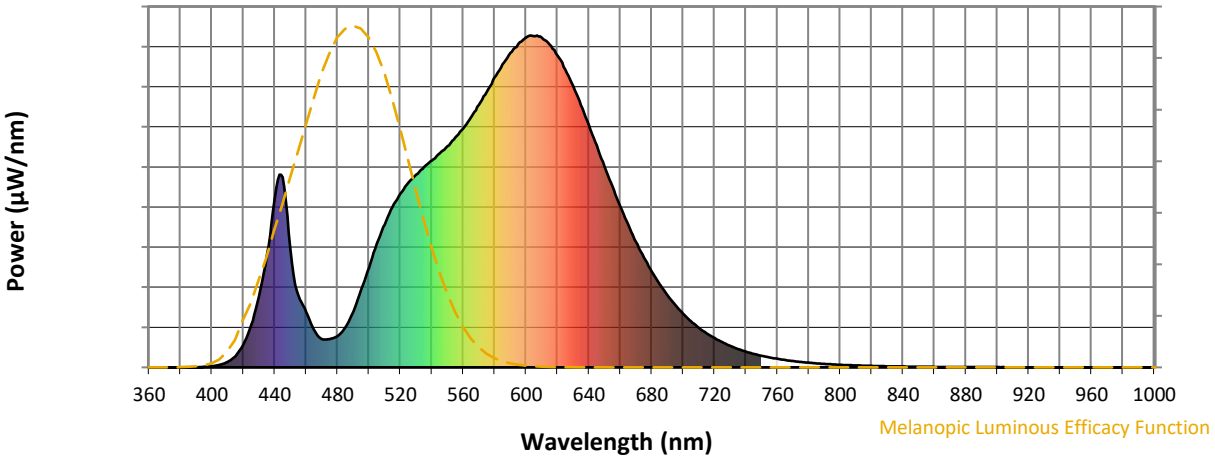
Melanopic Flux vs. Wavelength



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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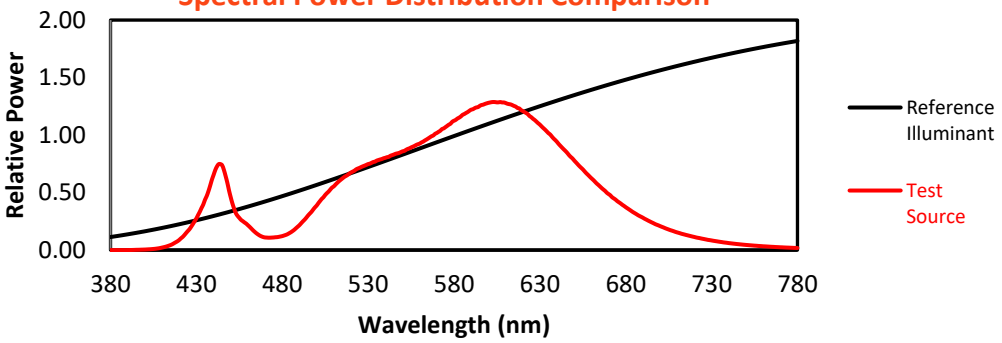
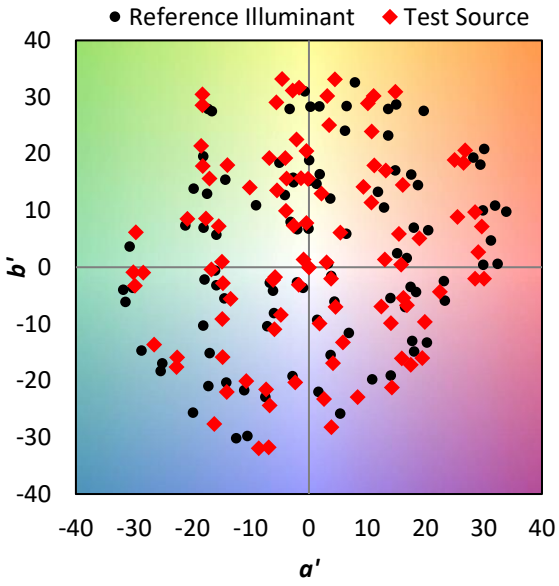
Summary

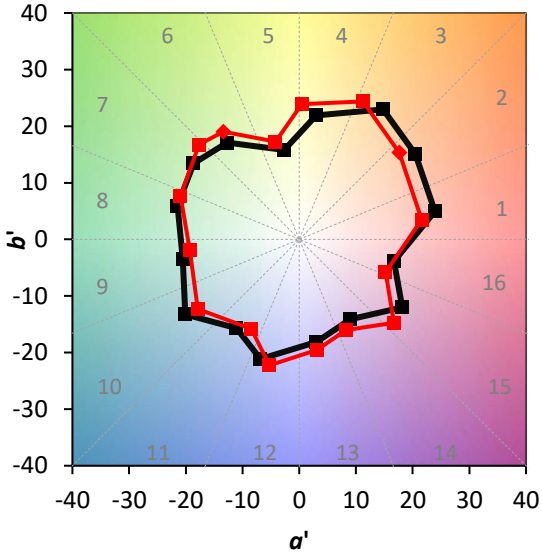
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

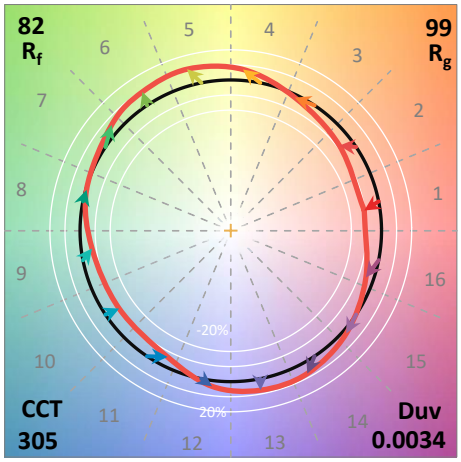
Spectral Power Distribution Comparison

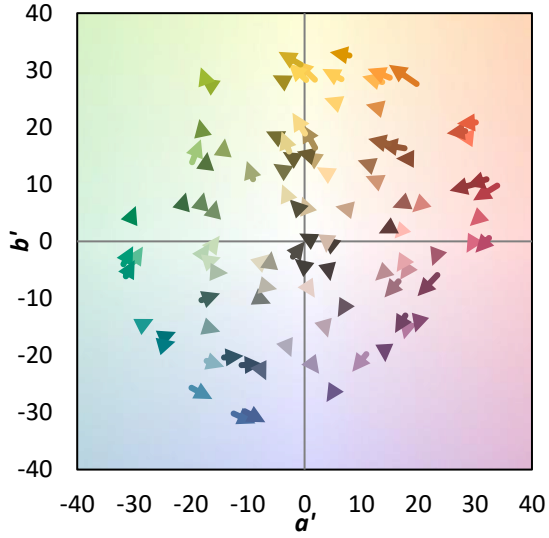


Color Vector Graphics









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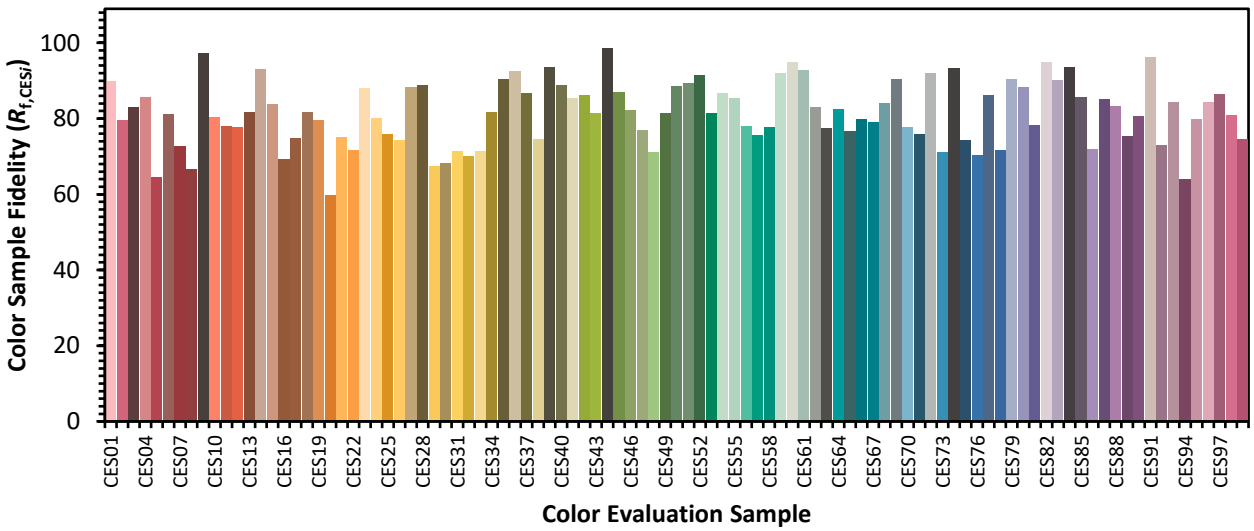
Individual Sample Fidelity Index ($R_{f,i}$)

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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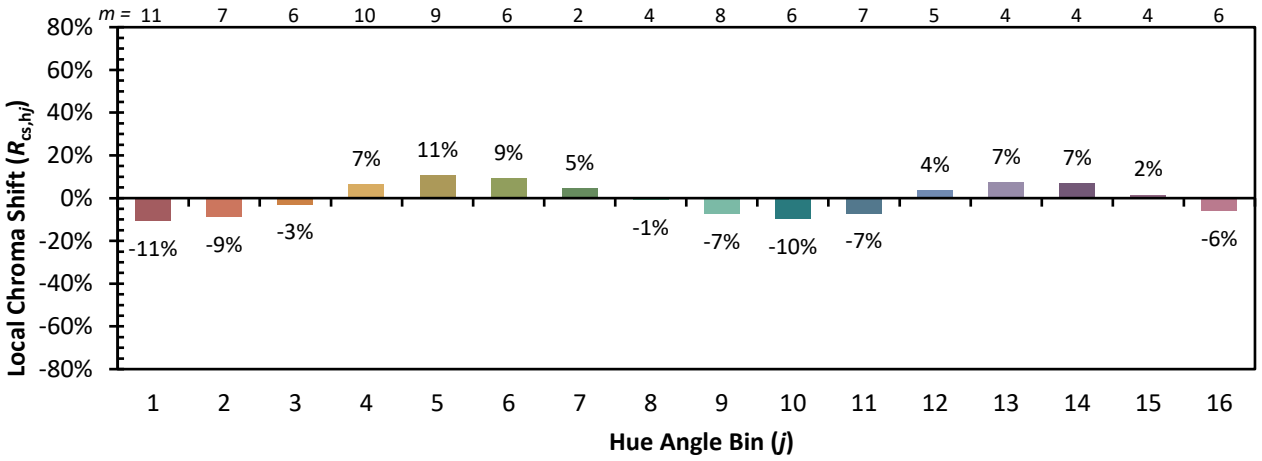
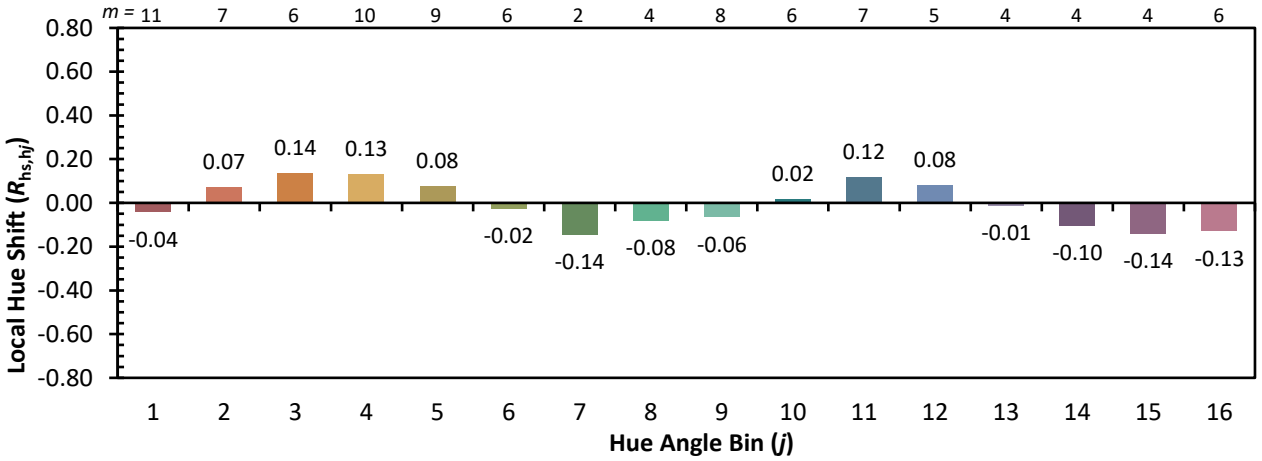
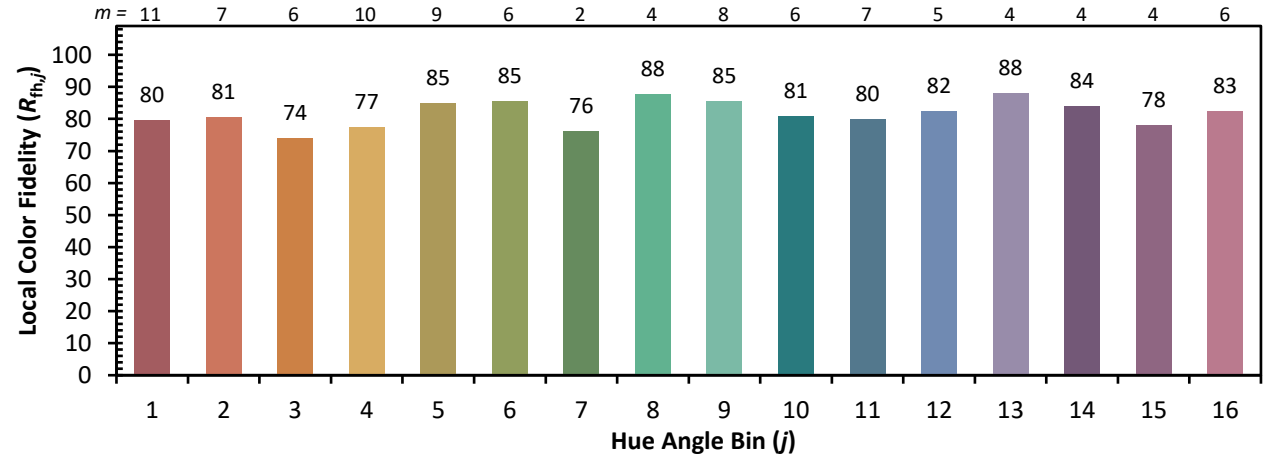
Color Rendition by Hue-Angle Bin







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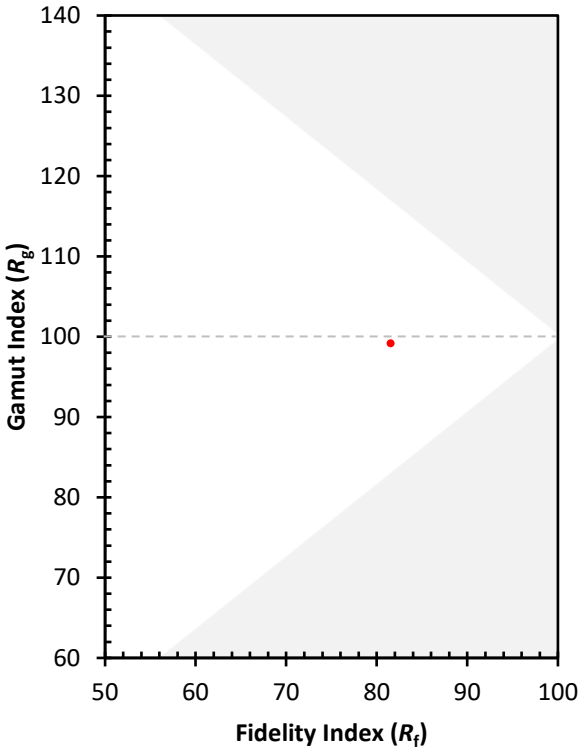
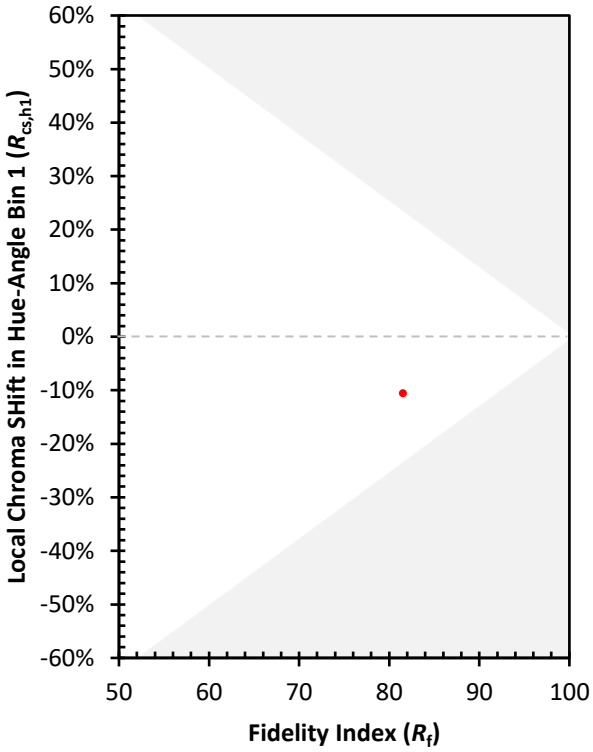
Measure Comparisons





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