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: P639481

Luminaire Tested: GWS-SA5B-830-U-T2-W

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:	P639481
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-19)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5B-830-U-T2-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	13994.3 lumens
Efficiency:	N/A
Efficacy:	121.0 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Medium
BUG Rating:	B2 - U0 - G2

Input Watts (W):	115.7
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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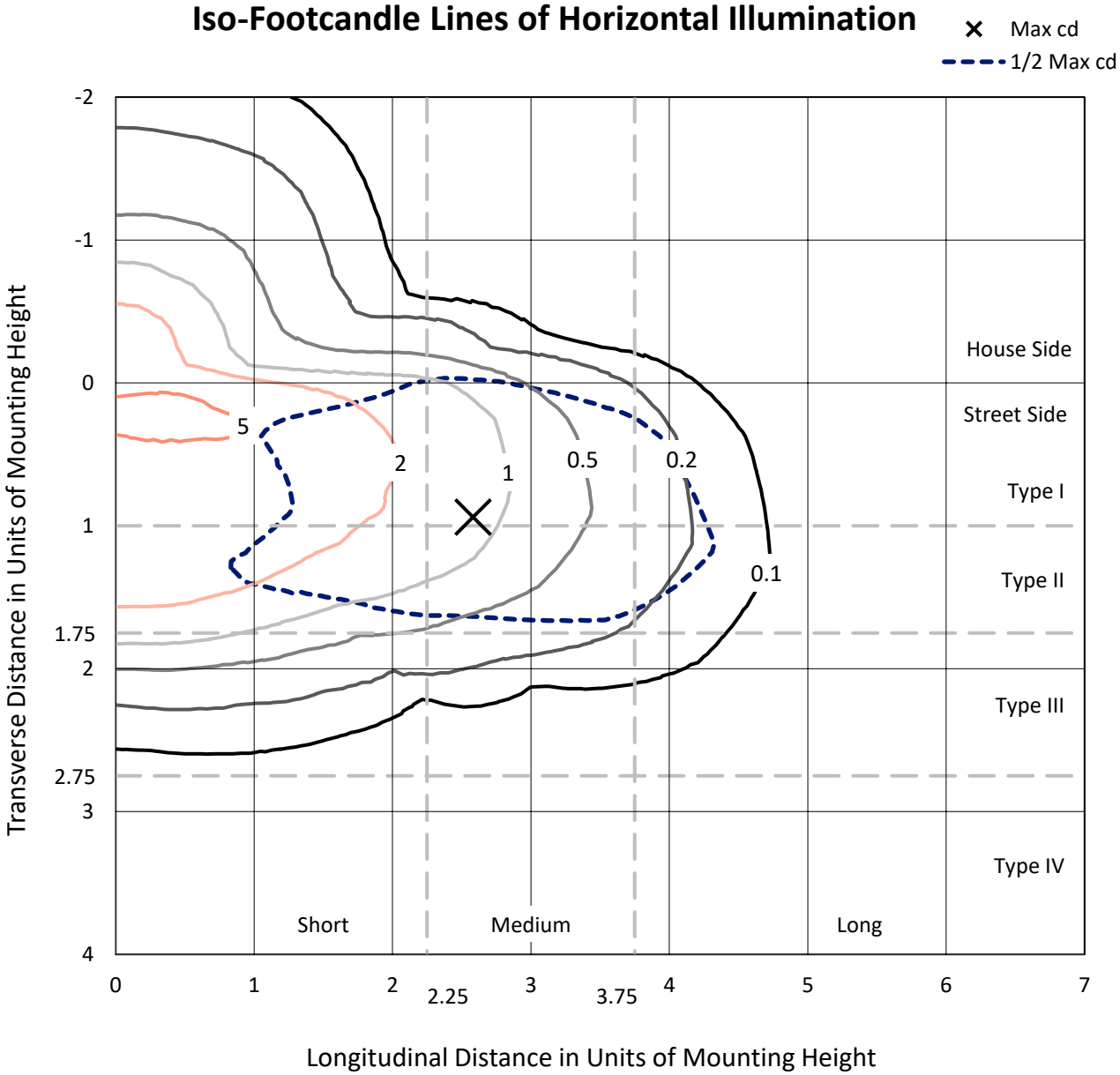
Scaled Data Report

REPORT NUMBER: P639481
CATALOG NUMBER: GWS-SA5B-830-U-T2-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 5.9 fc
Type II - Medium - N/A

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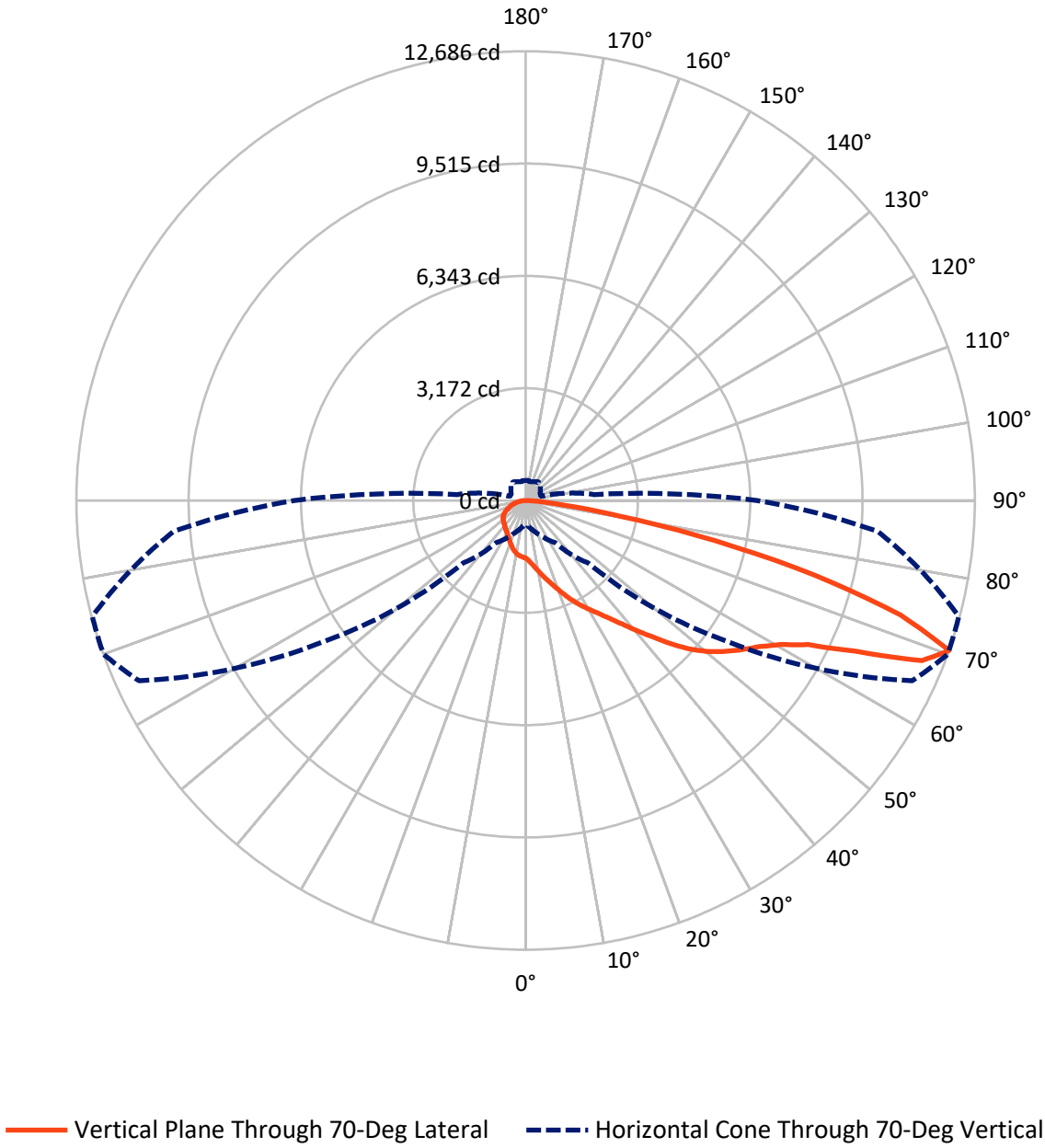
CATALOG NUMBER: GWS-SA5B-830-U-T2-W

Luminous Intensity Polar Plot



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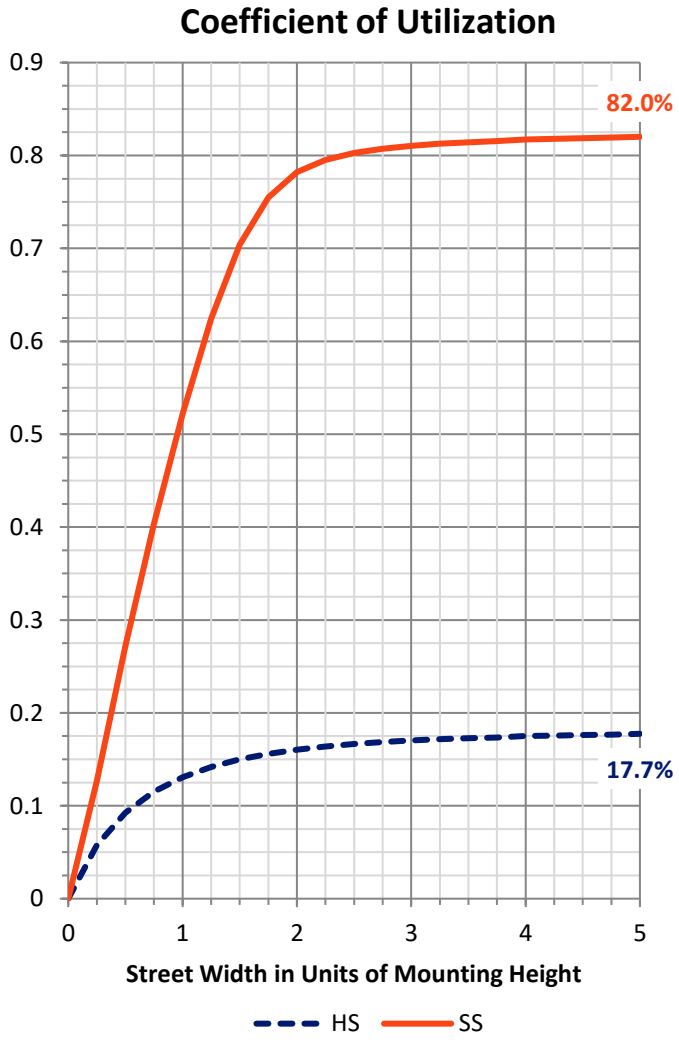
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2507.8	0.0	2507.8
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	11486.5	0.0	11486.5
	% Fixture	82.1	0.0	82.1
Total	Lumens	13994.3	0.0	13994.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.9	1.2
10°-20°	539.6	3.9
20°-30°	955.9	6.8
30°-40°	1438.7	10.3
40°-50°	2176.5	15.6
50°-60°	3118.0	22.3
60°-70°	3446.6	24.6
70°-80°	1945.0	13.9
80°-90°	208.0	1.5
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°	13994.3	100.0
0°-180°	13994.3	100.0



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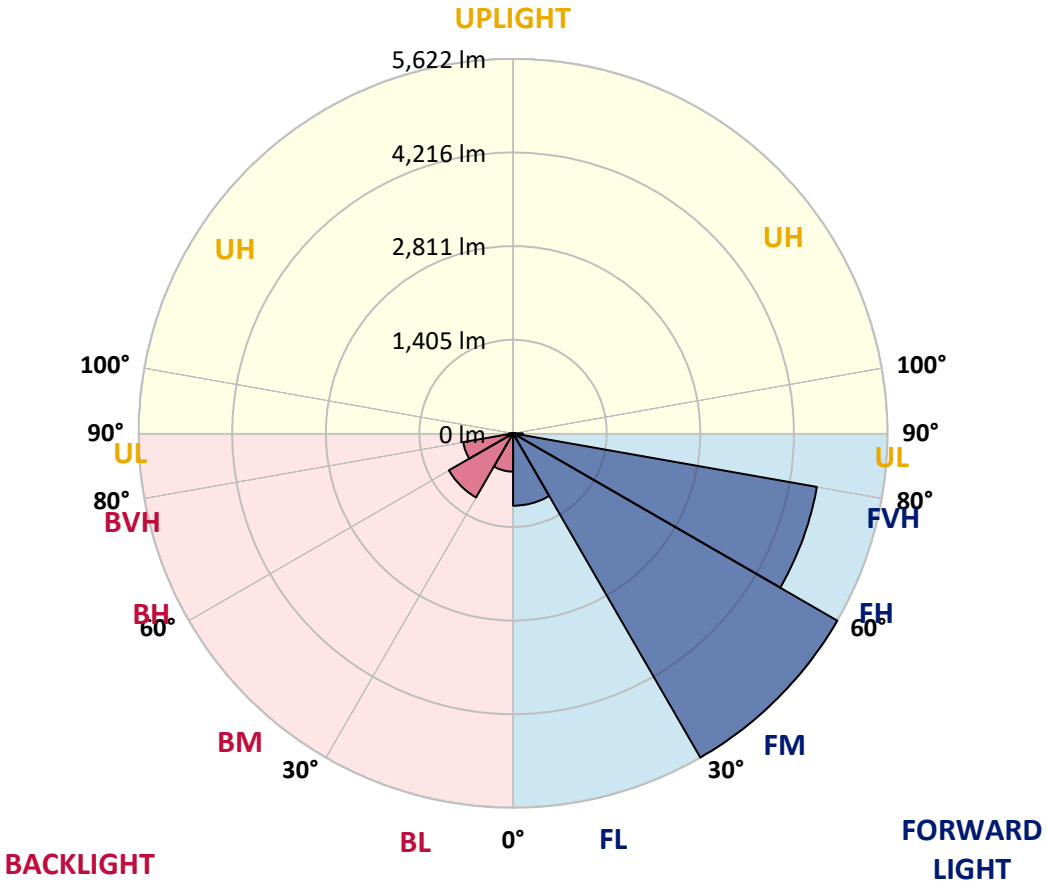
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1086.4	7.8			
FM	(30°-60°)	5621.5	40.2			
FH	(60°-80°)	4631.5	33.1			G2/5000
FVH	(80°-90°)	147.1	1.1			G2/225
BL	(0°-30°)	575.0	4.1	B2/1000		
BM	(30°-60°)	1111.7	7.9	B2/2500		
BH	(60°-80°)	760.1	5.4	B2/1000		G2/1000
BVH	(80°-90°)	61.0	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	1632.0	1632.0	1632.0	1632.0	1632.0	1632.0	1632.0	1632.0	*1632.0*	1632.0	1632.0
2.5°	1808.0	1804.9	1807.0	1804.9	1793.8	1766.5	1744.3	1716.0	*1696.7*	1685.6	1659.3
5°	2020.3	2017.3	2010.2	2000.1	1979.9	1942.5	1886.8	1825.2	*1787.7*	1759.4	1703.8
7.5°	2173.0	2173.0	2172.0	2159.9	2145.7	2106.3	2040.5	1959.6	*1905.0*	1856.5	1765.5
10°	2250.9	2255.9	2263.0	2280.2	2277.2	2255.9	2194.2	2107.3	*2038.5*	1981.9	1846.4
12.5°	2293.3	2296.4	2308.5	2343.9	2380.3	2385.3	2348.9	2257.9	*2183.1*	2107.3	1936.4
15°	2347.9	2348.9	2365.1	2407.6	2461.2	2514.8	2505.7	2414.7	*2337.8*	2253.9	2036.5
17.5°	2390.4	2397.5	2426.8	2476.4	2543.1	2616.9	2661.4	2604.8	*2509.7*	2413.7	2145.7
20°	2405.6	2410.6	2449.0	2524.9	2615.9	2720.0	2819.1	2804.0	*2707.9*	2594.7	2269.1
22.5°	2460.2	2460.2	2488.5	2552.2	2659.4	2811.0	2971.8	3011.3	*2926.3*	2793.9	2401.5
25°	2580.5	2576.5	2589.6	2615.9	2696.8	2883.9	3122.5	3240.8	*3145.7*	2997.1	2534.0
27.5°	2745.3	2743.3	2742.3	2746.3	2773.6	2947.6	3249.9	3455.2	*3360.1*	3192.3	2652.3
30°	2924.3	2918.2	2931.4	2919.2	2913.2	3023.4	3358.1	3647.3	*3573.5*	3385.4	2750.4
32.5°	3168.0	3156.9	3153.8	3114.4	3090.1	3141.7	3445.0	3865.7	*3807.0*	3593.7	2860.6
35°	3489.5	3479.4	3427.9	3365.2	3293.4	3317.6	3553.2	4079.1	*4083.1*	3854.6	3005.2
37.5°	3814.1	3816.1	3775.7	3628.1	3554.3	3540.1	3718.1	4338.9	*4425.9*	4166.0	3192.3
40°	4084.1	4096.2	4096.2	3940.5	3830.3	3817.2	3949.6	4647.3	*4820.2*	4548.2	3428.9
42.5°	4289.4	4300.5	4335.9	4223.6	4107.4	4152.9	4230.7	4956.7	*5267.2*	5020.4	3728.2
45°	4514.9	4524.0	4543.2	4478.5	4410.7	4532.1	4549.2	5326.8	*5778.8*	5550.3	4076.0
47.5°	4814.2	4806.1	4808.1	4760.6	4708.0	4904.2	4900.1	5638.3	*6273.3*	6130.7	4453.2
50°	5186.3	5201.4	5187.3	5093.3	5031.6	5210.5	5233.8	5983.1	*6708.1*	6705.1	4833.4
52.5°	5544.2	5550.3	5625.1	5629.2	5502.8	5465.4	5526.0	6330.9	*7075.1*	7230.9	5198.4
55°	5562.4	5585.7	5810.2	5972.0	6176.2	5875.9	5821.3	6662.6	*7430.1*	7745.5	5577.6
57.5°	5175.2	5212.6	5593.8	5942.6	6510.9	6580.7	6326.9	7091.3	*7785.0*	8252.1	6016.4
60°	4348.0	4425.9	4943.6	5477.5	6360.2	7087.3	7361.3	7673.8	*8251.1*	8769.9	6549.3
62.5°	2776.7	2807.0	3533.0	4426.9	5681.8	7037.7	8487.7	8700.1	*8961.0*	9444.3	7370.4
65°	1390.4	1487.4	1913.1	2642.2	4097.3	6201.5	9057.0	10579.9	*10260.3*	10599.1	8701.1
67.5°	943.4	974.8	1190.1	1587.5	2402.5	4393.5	8704.1	12163.3	*12069.3*	12124.9	10119.8
70°	*695.7*	*715.9*	*885.8*	*1124.4*	*1453.0*	*2494.6*	*6929.5*	*12044.0*	*12686.1*	*12665.9*	*9971.1*
72.5°	507.6	517.7	646.1	858.5	1076.9	1290.3	4231.7	9729.5	*11074.3*	11657.8	8720.3
75°	369.1	381.2	449.0	642.1	837.2	804.9	2089.1	7027.6	*8445.3*	9567.7	7104.5
77.5°	275.0	290.2	321.6	402.4	586.5	576.4	903.0	4563.4	*5462.3*	6249.0	4315.7
80°	198.2	201.2	219.4	257.8	372.1	337.7	429.7	2379.3	*2728.1*	2989.0	1691.7
82.5°	120.3	123.4	146.6	158.8	230.5	212.3	223.5	770.5	*1104.2*	1171.9	632.0
85°	35.4	37.4	66.7	72.8	96.1	91.0	90.0	313.5	*374.1*	478.3	248.7
87.5°	0.0	0.0	0.0	0.0	1.0	6.1	11.1	55.6	*83.9*	116.3	60.7
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: P639481
CATALOG NUMBER: GWS-SA5B-830-U-T2-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1632.0	1632.0	1632.0	1632.0	1632.0	1632.0	1632.0	1632.0	1632.0	1632.0	1632.0
2.5°	1649.2	1626.0	1613.8	1592.6	1577.4	1562.3	1547.1	1532.9	1526.9	1517.8	1519.8
5°	1678.5	1642.1	1605.7	1564.3	1528.9	1499.6	1473.3	1450.0	1439.9	1430.8	1434.8
7.5°	1723.0	1668.4	1598.7	1522.8	1467.2	1426.8	1399.5	1383.3	1378.2	1371.1	1371.1
10°	1779.7	1697.8	1575.4	1467.2	1400.5	1368.1	1356.0	1355.0	1360.0	1361.0	1359.0
12.5°	1842.3	1726.1	1541.0	1401.5	1344.9	1334.7	1343.8	1361.0	1378.2	1387.3	1385.3
15°	1907.1	1744.3	1482.4	1338.8	1304.4	1317.6	1346.9	1381.3	1414.6	1431.8	1430.8
17.5°	1967.7	1748.3	1406.5	1278.1	1269.0	1302.4	1352.9	1406.5	1452.0	1476.3	1477.3
20°	2035.5	1741.2	1328.7	1223.5	1233.6	1288.2	1355.0	1419.7	1473.3	1497.5	1503.6
22.5°	2097.2	1717.0	1252.8	1171.9	1203.3	1271.0	1338.8	1399.5	1447.0	1470.2	1478.3
25°	2152.8	1670.4	1169.9	1128.5	1180.0	1246.8	1298.3	1340.8	1374.2	1388.3	1399.5
27.5°	2183.1	1600.7	1107.2	1094.1	1157.8	1212.4	1240.7	1253.8	1265.0	1260.9	1269.0
30°	2189.2	1513.7	1052.6	1066.8	1124.4	1164.9	1170.9	1157.8	1138.6	1107.2	1114.3
32.5°	2183.1	1413.6	1007.1	1037.5	1087.0	1111.3	1103.2	1068.8	1022.3	973.8	976.8
35°	2185.1	1312.5	969.7	1005.1	1043.5	1056.7	1036.4	988.9	939.4	894.9	892.9
37.5°	2207.4	1227.6	938.4	973.8	1001.1	1003.1	980.8	931.3	906.0	872.6	868.6
40°	2269.1	1164.9	910.1	942.4	959.6	958.6	933.3	897.9	915.1	904.0	901.0
42.5°	2370.2	1126.4	886.8	909.0	921.2	923.2	903.0	880.7	918.1	904.0	898.9
45°	2533.0	1124.4	870.6	875.7	894.9	909.0	894.9	869.6	883.8	815.0	801.9
47.5°	2726.1	1158.8	858.5	846.3	879.7	905.0	882.7	842.3	813.0	750.3	741.2
50°	2958.7	1228.6	847.4	815.0	857.5	889.8	867.6	812.0	767.5	734.1	729.1
52.5°	3234.7	1320.6	833.2	779.6	824.1	881.7	867.6	808.9	750.3	720.0	714.9
55°	3523.9	1426.8	817.0	737.1	786.7	883.8	874.7	787.7	737.1	721.0	716.9
57.5°	3882.9	1554.2	787.7	687.6	753.3	865.6	846.3	775.6	728.0	714.9	710.9
60°	4349.0	1743.3	732.1	637.0	714.9	833.2	821.1	755.3	703.8	692.7	689.6
62.5°	5087.2	2063.8	664.3	588.5	669.4	765.5	783.7	716.9	673.4	672.4	671.4
65°	6290.5	2449.0	584.5	545.0	621.9	709.8	734.1	677.5	642.1	653.2	652.2
67.5°	7133.8	2482.4	518.7	499.5	566.3	649.2	684.6	637.0	598.6	619.8	618.8
70°	*6534.2*	*1936.4*	*462.1*	*452.0*	*506.6*	*583.4*	*631.0*	*586.5*	*548.1*	*568.3*	*564.2*
72.5°	5510.9	1484.4	408.5	402.4	445.9	514.7	562.2	535.9	495.5	495.5	486.4
75°	4428.9	1224.5	351.9	348.9	378.2	444.9	498.5	454.0	416.6	414.6	408.5
77.5°	2540.1	802.9	295.3	293.2	302.3	372.1	387.3	378.2	349.9	336.7	332.7
80°	1012.2	417.6	232.6	219.4	228.5	273.0	305.4	290.2	265.9	249.8	240.7
82.5°	392.3	209.3	163.8	143.6	156.7	197.2	221.4	216.4	200.2	163.8	153.7
85°	159.8	102.1	98.1	82.9	91.0	106.2	127.4	110.2	91.0	64.7	61.7
87.5°	42.5	37.4	36.4	22.2	17.2	5.1	1.0	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

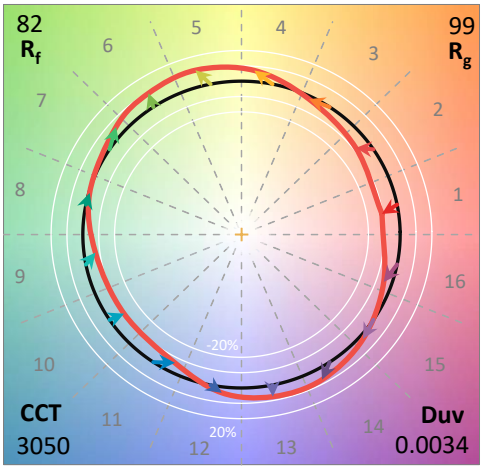
Test Information

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

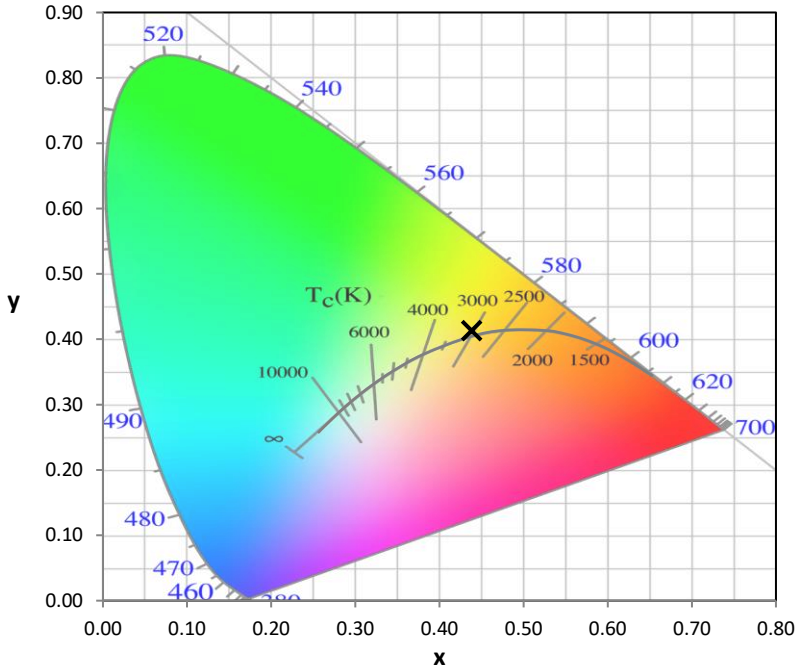
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

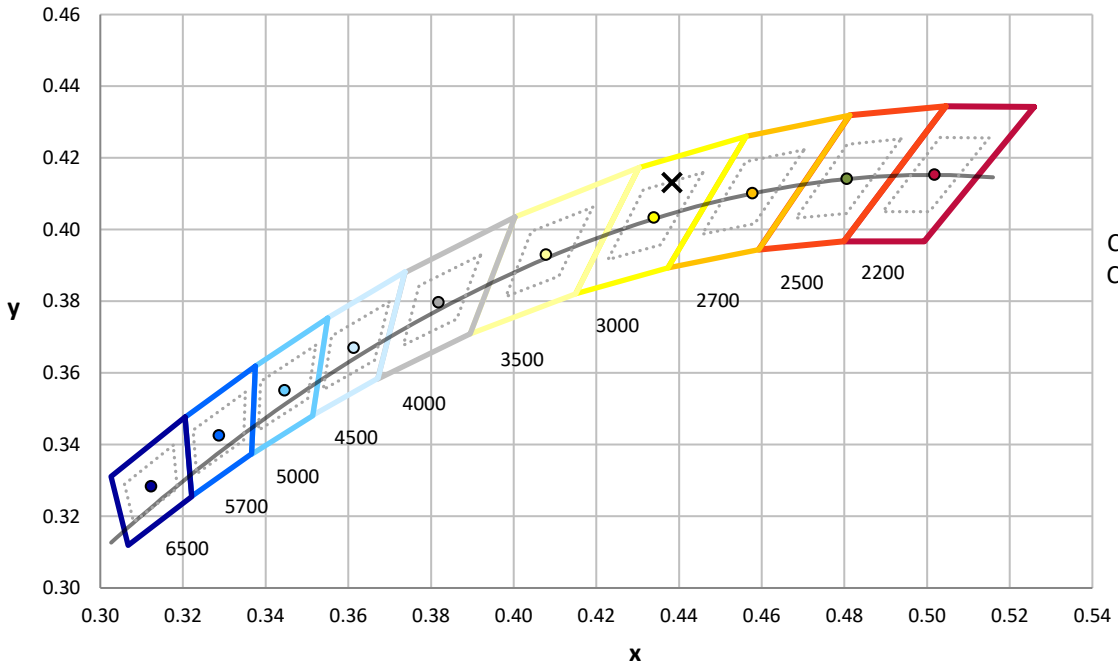
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

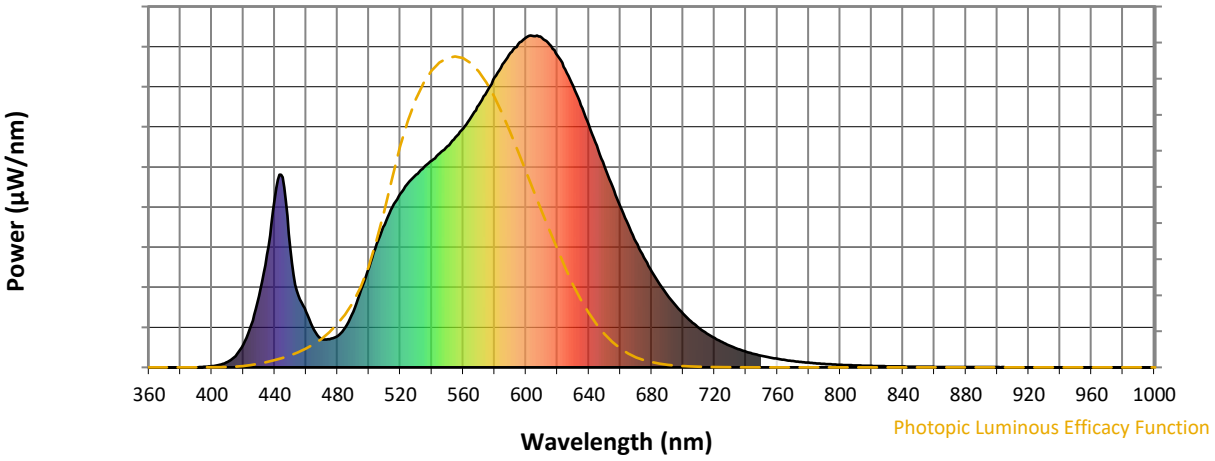


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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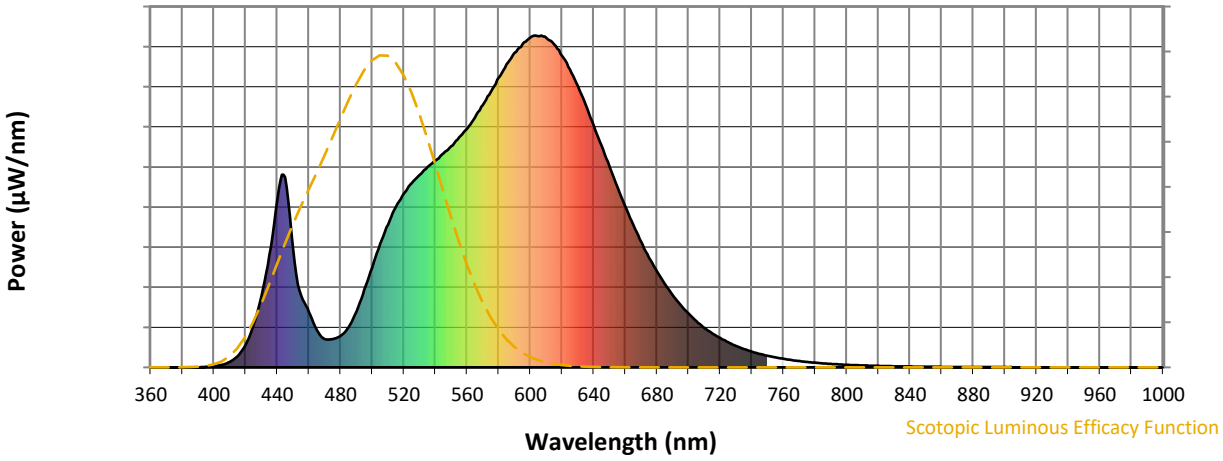
Scotopic Flux vs. Wavelength



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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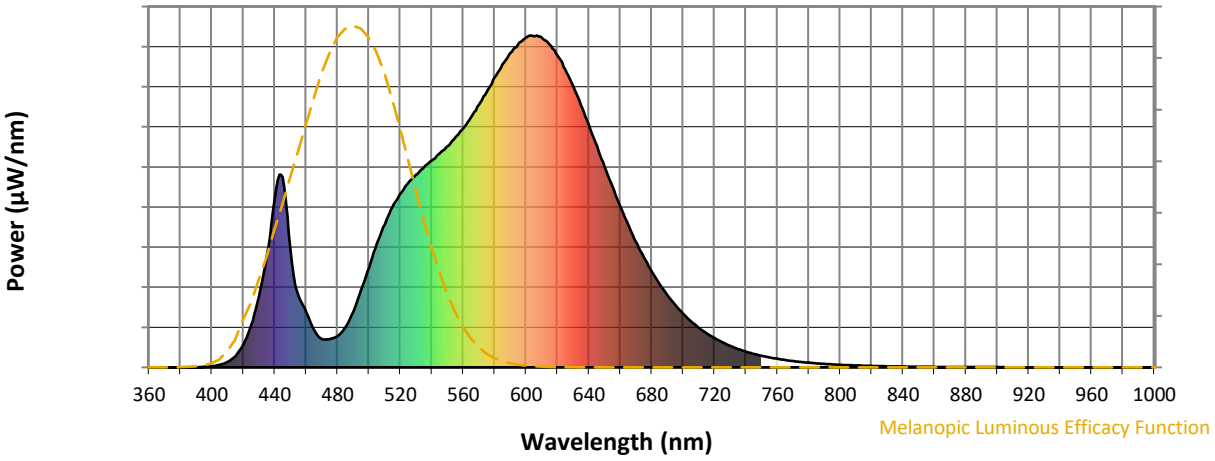
Melanopic Flux vs. Wavelength



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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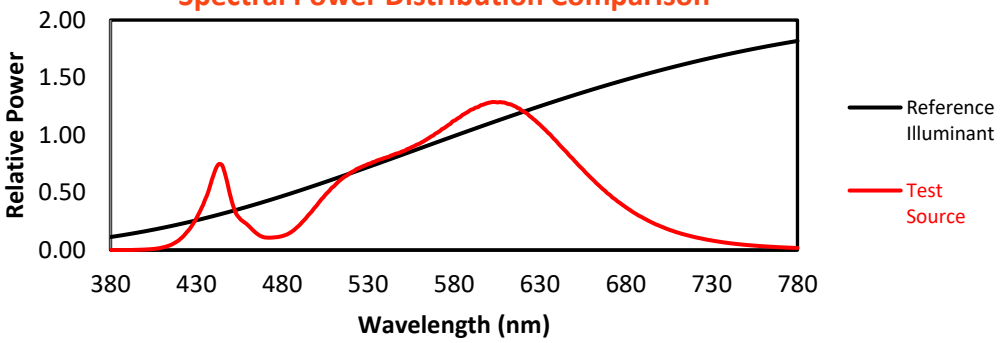
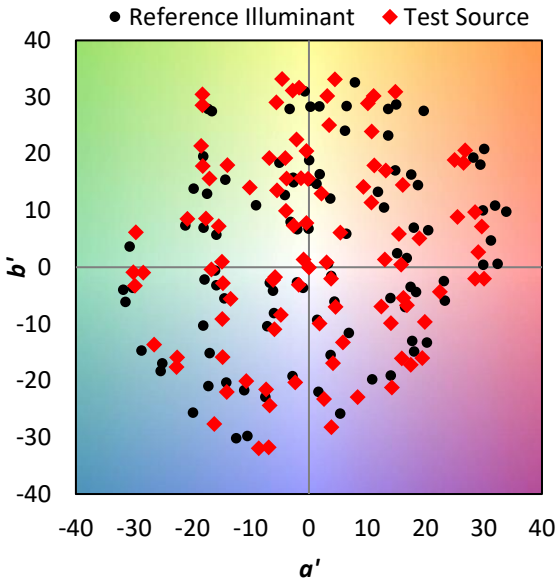
Summary

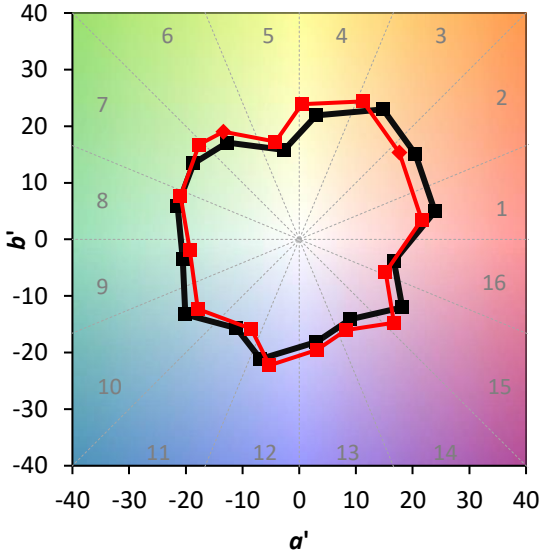
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

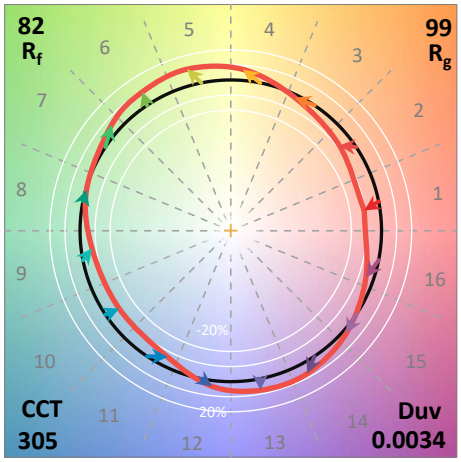
Spectral Power Distribution Comparison

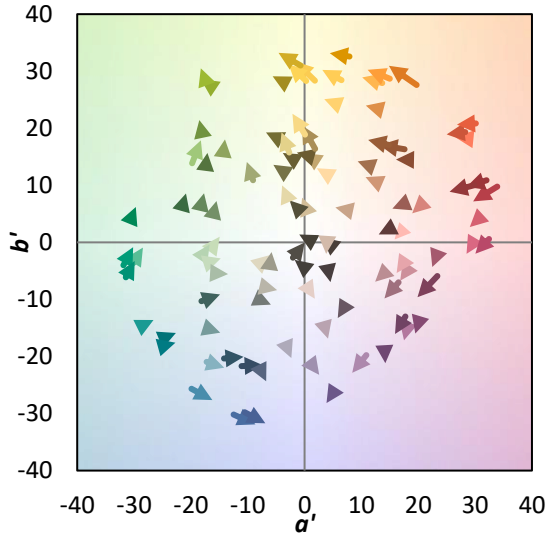


Color Vector Graphics









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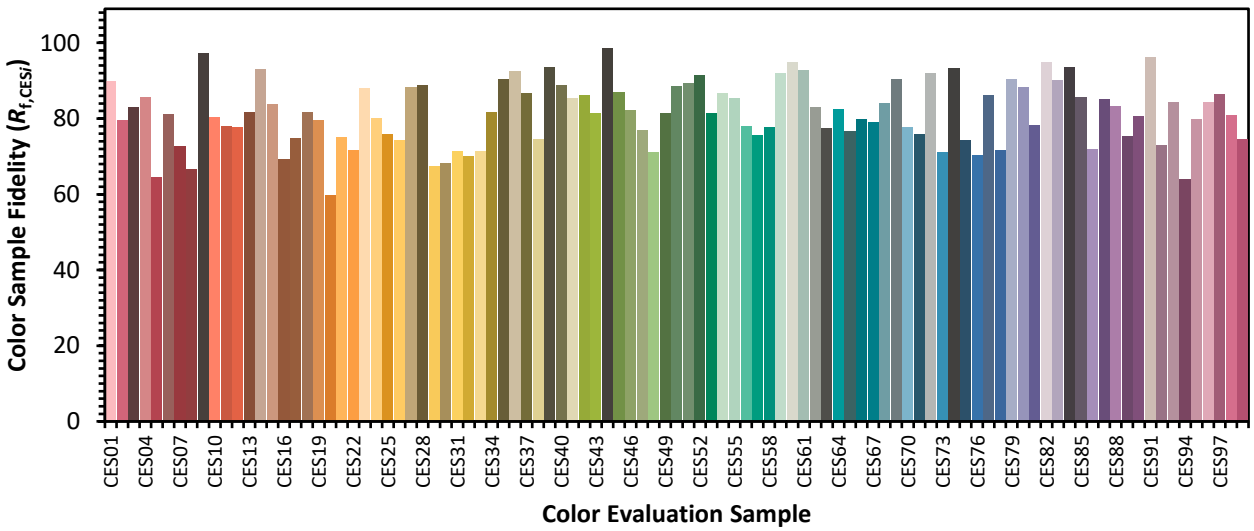
Individual Sample Fidelity Index ($R_{f,i}$)

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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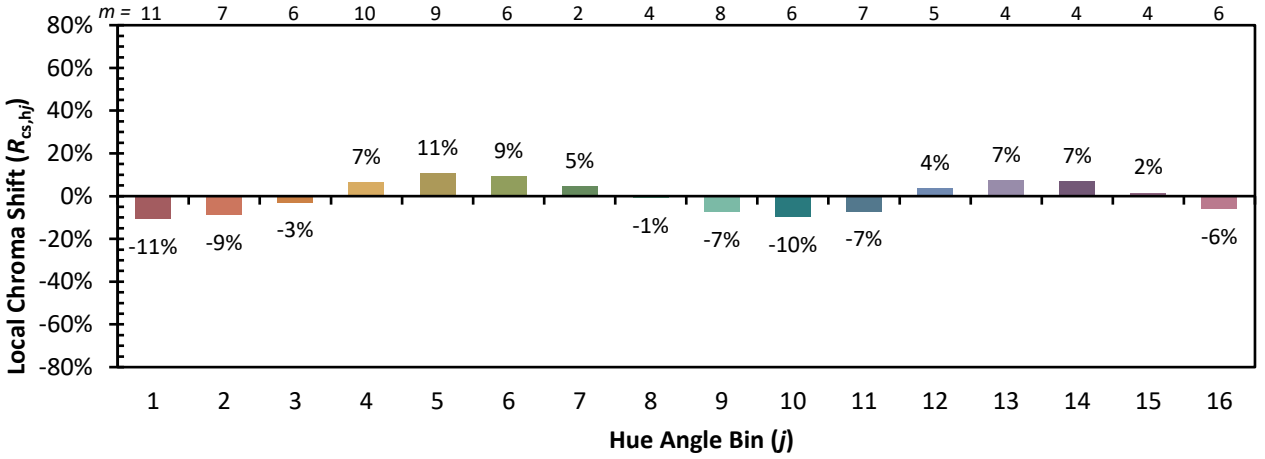
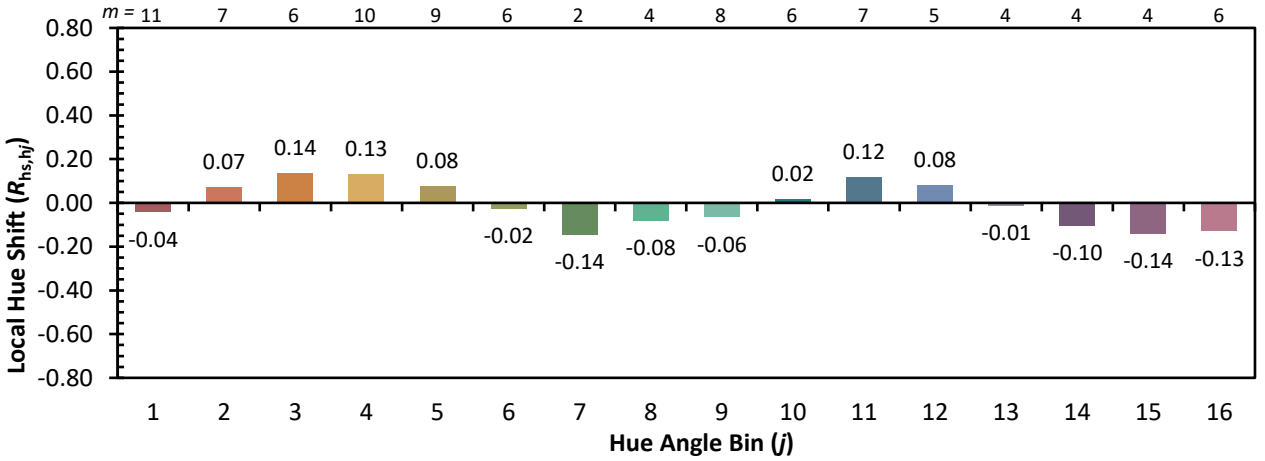
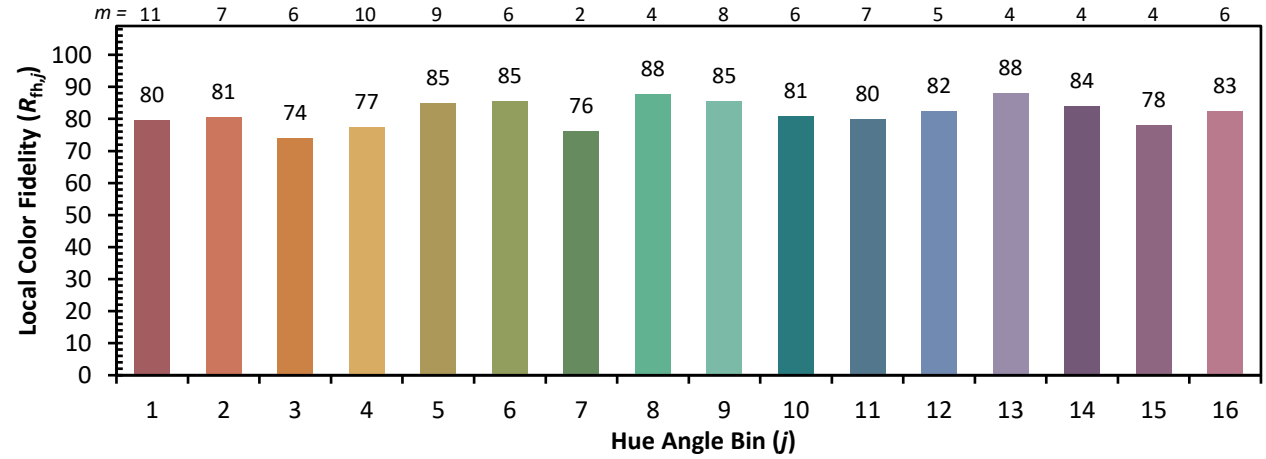
Color Rendition by Hue-Angle Bin







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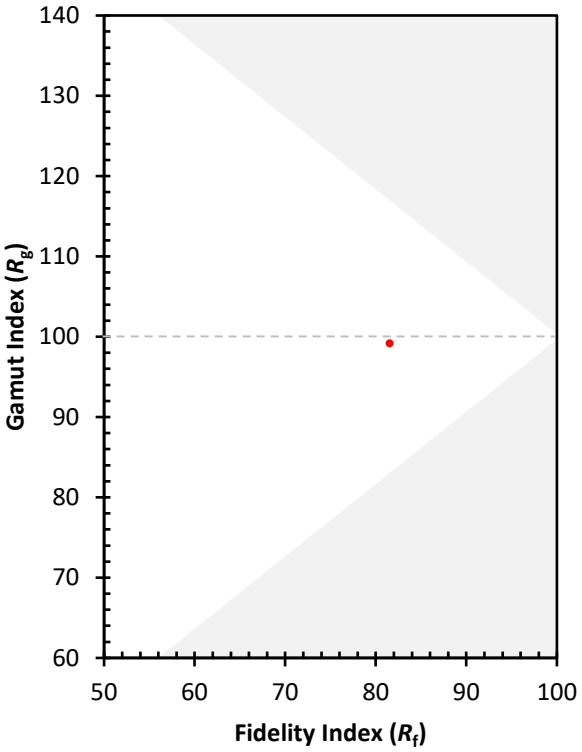
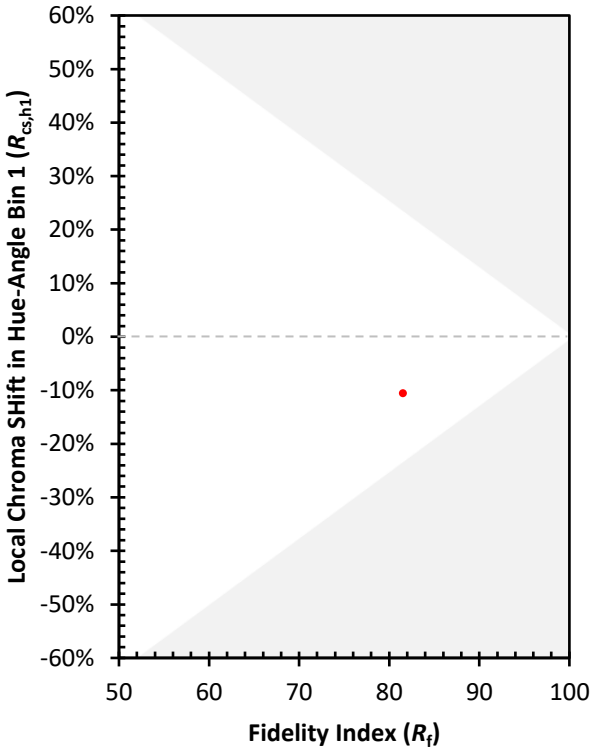
Measure Comparisons





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