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: P638491

Luminaire Tested: GWS-SA4E-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:	P638491
	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-SA4E-830-U-T2-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	24119.5 lumens
Efficiency:	N/A
Efficacy:	119.0 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Medium
BUG Rating:	B3 - U0 - G4

Input Watts (W):	202.6
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: P638491
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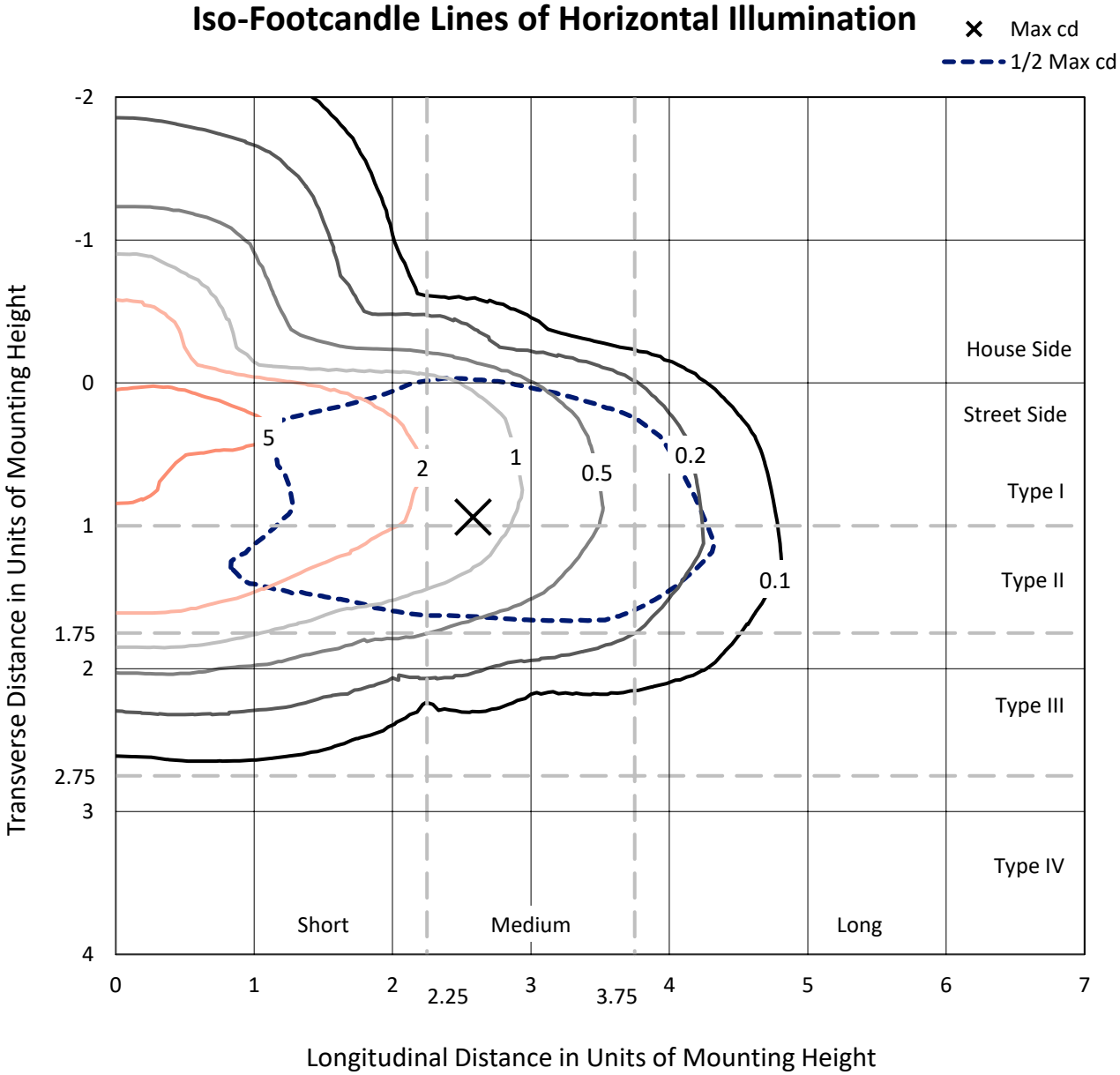
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type II - Medium - N/A

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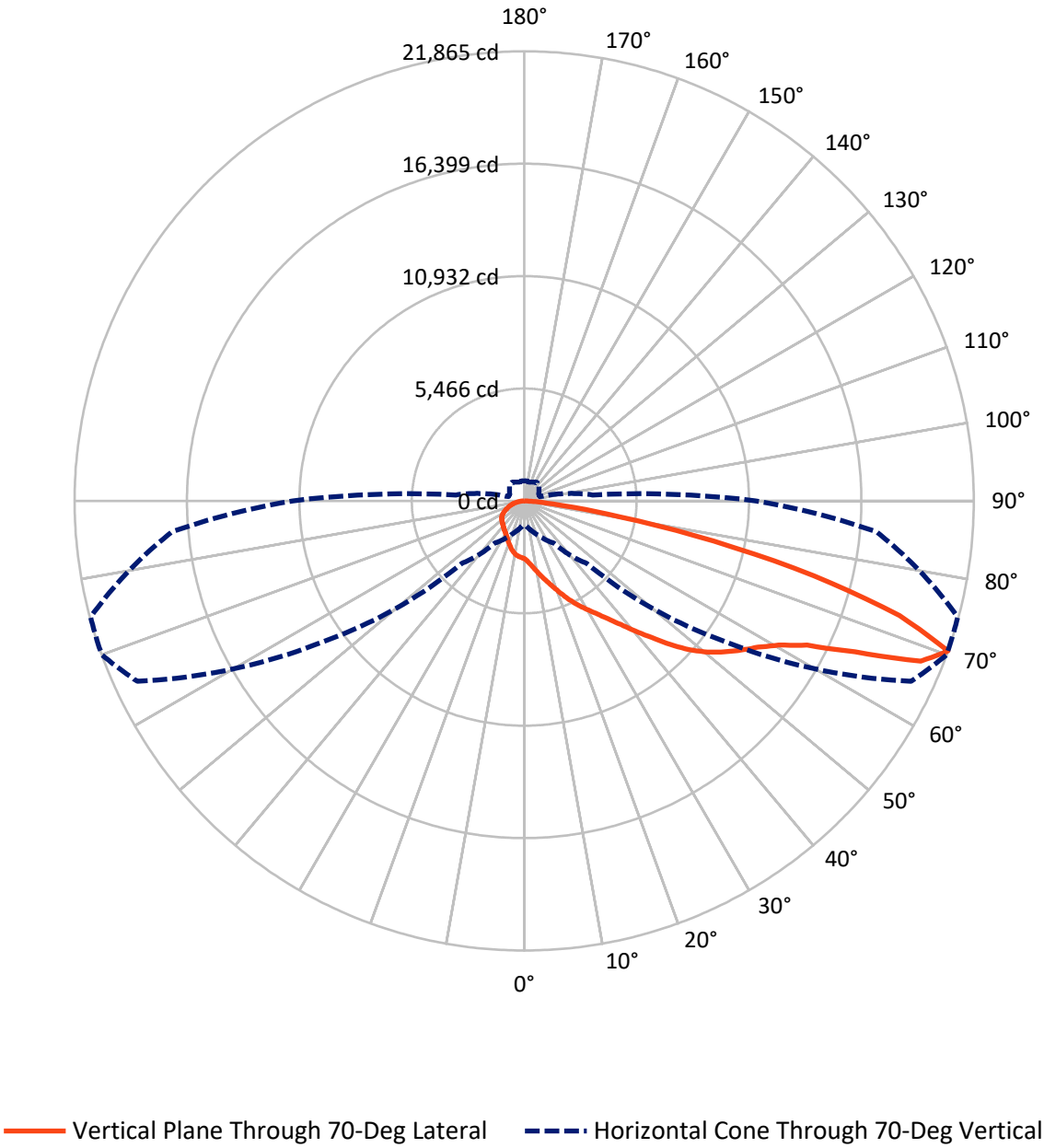
Luminous Intensity Polar Plot



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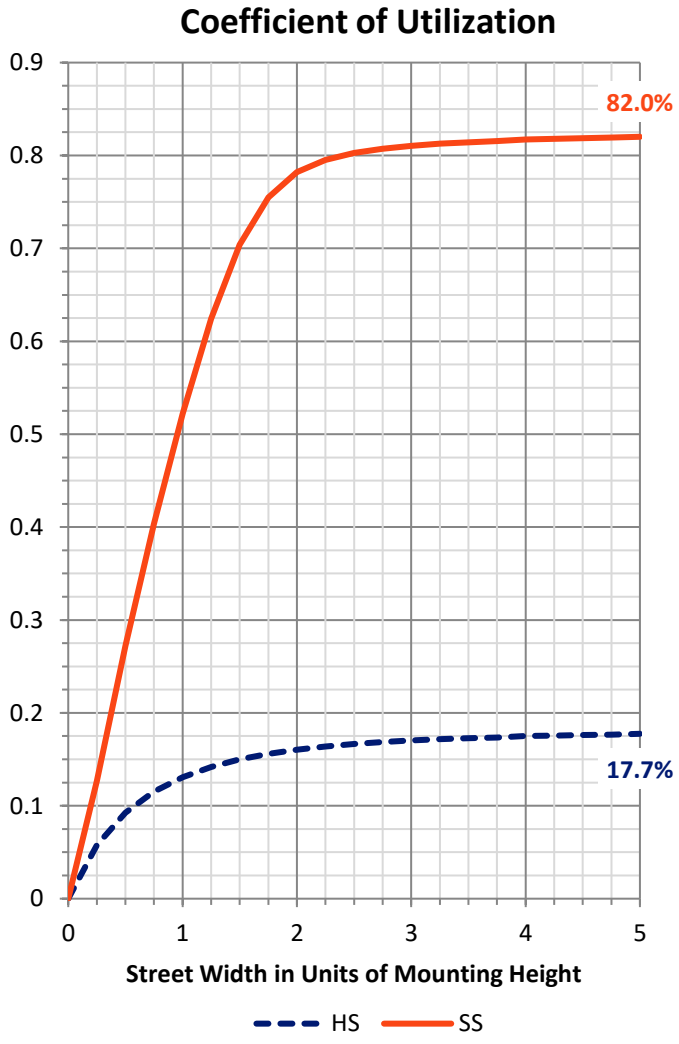
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4322.3	0.0	4322.3
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	19797.2	0.0	19797.2
	% Fixture	82.1	0.0	82.1
Total	Lumens	24119.5	0.0	24119.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.9	1.2
10°-20°	930.0	3.9
20°-30°	1647.5	6.8
30°-40°	2479.6	10.3
40°-50°	3751.3	15.6
50°-60°	5374.0	22.3
60°-70°	5940.3	24.6
70°-80°	3352.3	13.9
80°-90°	358.6	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°	24119.5	100.0
0°-180°	24119.5	100.0



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REPORT NUMBER: P638491
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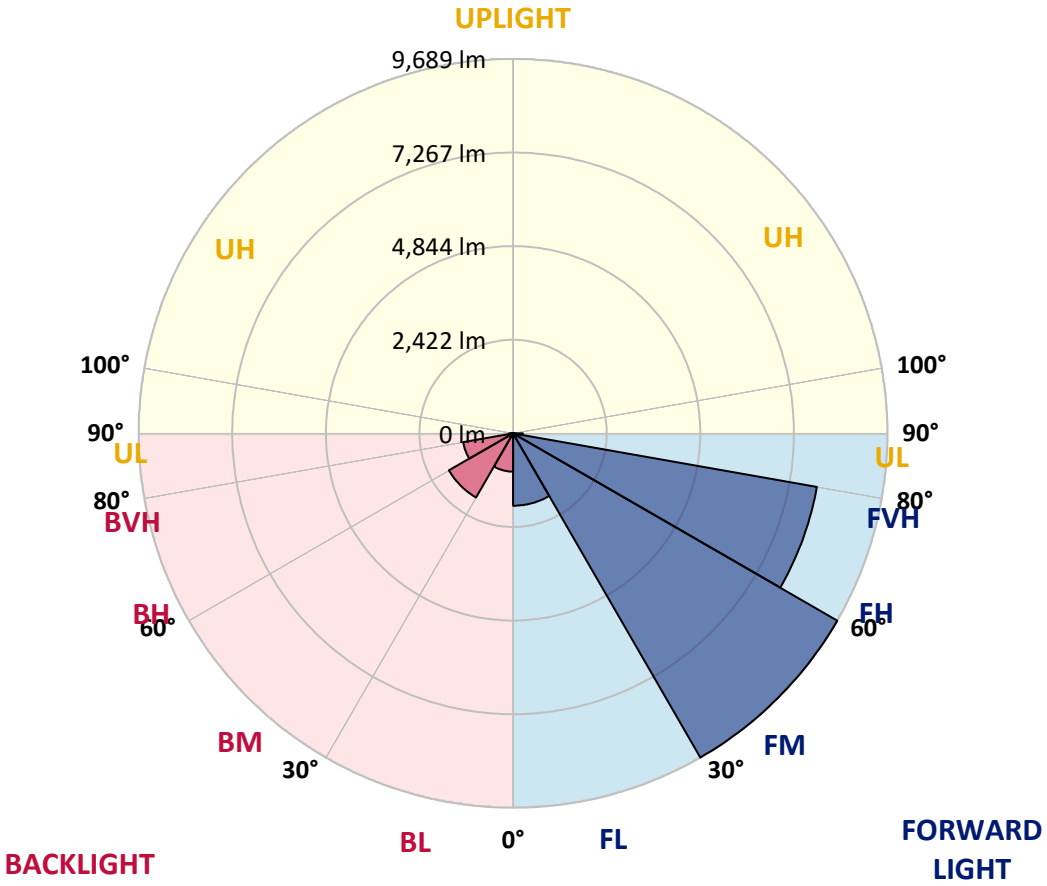
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1872.4	7.8			
FM	(30°-60°)	9688.8	40.2			
FH	(60°-80°)	7982.6	33.1			G4/12000
FVH	(80°-90°)	253.5	1.1			G3/500
BL	(0°-30°)	991.0	4.1	B2/1000		
BM	(30°-60°)	1916.1	7.9	B2/2500		
BH	(60°-80°)	1310.0	5.4	B3/2500		G3/2500
BVH	(80°-90°)	105.1	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
Type II Medium



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REPORT NUMBER: P638491
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	2812.8	2812.8	2812.8	2812.8	2812.8	2812.8	2812.8	2812.8	*2812.8*	2812.8	2812.8
2.5°	3116.1	3110.8	3114.3	3110.8	3091.7	3044.6	3006.3	2957.5	*2924.4*	2905.2	2859.9
5°	3482.1	3476.8	3464.6	3447.2	3412.3	3347.9	3252.0	3145.7	*3081.2*	3032.4	2936.6
7.5°	3745.2	3745.2	3743.5	3722.6	3698.2	3630.2	3516.9	3377.5	*3283.4*	3199.7	3042.9
10°	3879.4	3888.1	3900.3	3929.9	3924.7	3888.1	3781.8	3631.9	*3513.4*	3415.8	3182.3
12.5°	3952.6	3957.8	3978.7	4039.7	4102.5	4111.2	4048.5	3891.6	*3762.6*	3631.9	3337.4
15°	4046.7	4048.5	4076.3	4149.5	4241.9	4334.3	4318.6	4161.7	*4029.3*	3884.6	3509.9
17.5°	4119.9	4132.1	4182.7	4268.0	4383.1	4510.3	4587.0	4489.4	*4325.6*	4160.0	3698.2
20°	4146.1	4154.8	4221.0	4351.7	4508.5	4688.1	4858.8	4832.7	*4667.1*	4472.0	3910.8
22.5°	4240.2	4240.2	4289.0	4398.8	4583.5	4844.9	5122.0	5190.0	*5043.6*	4815.3	4139.1
25°	4447.6	4440.6	4463.2	4508.5	4648.0	4970.4	5381.7	5585.6	*5421.8*	5165.6	4367.4
27.5°	4731.6	4728.1	4726.4	4733.4	4780.4	5080.2	5601.3	5955.1	*5791.2*	5501.9	4571.3
30°	5040.1	5029.6	5052.3	5031.4	5020.9	5210.9	5787.7	6286.2	*6159.0*	5834.8	4740.3
32.5°	5460.1	5440.9	5435.7	5367.7	5325.9	5414.8	5937.6	6662.6	*6561.5*	6193.8	4930.3
35°	6014.3	5996.9	5908.0	5799.9	5676.2	5718.0	6124.1	7030.3	*7037.3*	6643.4	5179.5
37.5°	6573.7	6577.2	6507.5	6253.1	6125.8	6101.4	6408.2	7478.2	*7628.1*	7180.2	5501.9
40°	7039.1	7060.0	7060.0	6791.6	6601.6	6579.0	6807.3	8009.8	*8307.8*	7839.0	5909.7
42.5°	7392.8	7412.0	7473.0	7279.6	7079.1	7157.6	7291.8	8543.1	*9078.1*	8652.9	6425.6
45°	7781.5	7797.2	7830.3	7718.7	7602.0	7811.1	7840.7	9180.9	*9959.9*	9566.1	7025.1
47.5°	8297.3	8283.4	8286.9	8205.0	8114.3	8452.4	8445.5	9717.7	*10812.2*	10566.4	7675.2
50°	8938.7	8964.8	8940.4	8778.3	8672.0	8980.5	9020.6	10312.0	*11561.5*	11556.3	8330.4
52.5°	9555.6	9566.1	9695.0	9702.0	9484.2	9419.7	9524.2	10911.5	*12194.2*	12462.6	8959.6
55°	9587.0	9627.1	10014.0	10292.8	10644.8	10127.2	10033.1	11483.1	*12805.9*	13349.6	9613.1
57.5°	8919.5	8984.0	9641.0	10242.3	11221.7	11342.0	10904.5	12222.1	*13417.6*	14222.8	10369.5
60°	7493.9	7628.1	8520.4	9440.6	10962.0	12215.1	12687.4	13225.9	*14221.0*	15115.1	11287.9
62.5°	4785.7	4837.9	6089.2	7629.9	9792.6	12129.7	14628.8	14994.8	*15444.4*	16277.5	12703.1
65°	2396.3	2563.6	3297.3	4553.9	7061.7	10688.4	15610.0	18234.6	*17683.9*	18267.7	14996.5
67.5°	1626.0	1680.0	2051.2	2736.2	4140.8	7572.3	15001.8	20963.8	*20801.7*	20897.6	17441.7
70°	*1199.0*	*1233.9*	*1526.7*	*1938.0*	*2504.4*	*4299.4*	*11943.2*	*20758.2*	*21864.8*	*21830.0*	*17185.5*
72.5°	874.9	892.3	1113.6	1479.6	1856.1	2223.8	7293.5	16768.9	*19086.8*	20092.4	15029.7
75°	636.1	657.0	773.8	1106.7	1443.0	1387.2	3600.6	12112.3	*14555.6*	16490.1	12244.7
77.5°	474.0	500.2	554.2	693.6	1010.8	993.4	1556.3	7865.1	*9414.5*	10770.3	7438.1
80°	341.6	346.8	378.2	444.4	641.3	582.1	740.7	4100.7	*4702.0*	5151.6	2915.7
82.5°	207.4	212.6	252.7	273.6	397.4	366.0	385.2	1328.0	*1903.1*	2019.9	1089.2
85°	61.0	64.5	115.0	125.5	165.6	156.8	155.1	540.3	*644.8*	824.3	428.7
87.5°	0.0	0.0	0.0	0.0	1.7	10.5	19.2	95.9	*144.7*	200.4	104.6
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: P638491
CATALOG NUMBER: GWS-SA4E-830-U-T2-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2812.8	2812.8	2812.8	2812.8	2812.8	2812.8	2812.8	2812.8	2812.8	2812.8	2812.8
2.5°	2842.5	2802.4	2781.5	2744.9	2718.7	2692.6	2666.4	2642.0	2631.6	2615.9	2619.4
5°	2893.0	2830.3	2767.5	2696.1	2635.1	2584.5	2539.2	2499.1	2481.7	2466.0	2473.0
7.5°	2969.7	2875.6	2755.3	2624.6	2528.8	2459.1	2412.0	2384.1	2375.4	2363.2	2363.2
10°	3067.3	2926.1	2715.2	2528.8	2413.7	2358.0	2337.1	2335.3	2344.0	2345.8	2342.3
12.5°	3175.3	2974.9	2656.0	2415.5	2317.9	2300.5	2316.1	2345.8	2375.4	2391.1	2387.6
15°	3286.9	3006.3	2554.9	2307.4	2248.2	2270.8	2321.4	2380.6	2438.1	2467.8	2466.0
17.5°	3391.4	3013.3	2424.2	2202.9	2187.2	2244.7	2331.8	2424.2	2502.6	2544.4	2546.2
20°	3508.2	3001.1	2290.0	2108.8	2126.2	2220.3	2335.3	2446.9	2539.2	2581.0	2591.5
22.5°	3614.5	2959.2	2159.3	2019.9	2073.9	2190.7	2307.4	2412.0	2493.9	2534.0	2547.9
25°	3710.4	2879.1	2016.4	1944.9	2033.8	2148.8	2237.7	2310.9	2368.4	2392.8	2412.0
27.5°	3762.6	2758.8	1908.3	1885.7	1995.5	2089.6	2138.4	2161.0	2180.2	2173.2	2187.2
30°	3773.1	2608.9	1814.2	1838.6	1938.0	2007.7	2018.1	1995.5	1962.4	1908.3	1920.5
32.5°	3762.6	2436.4	1735.8	1788.1	1873.5	1915.3	1901.4	1842.1	1761.9	1678.3	1683.5
35°	3766.1	2262.1	1671.3	1732.3	1798.5	1821.2	1786.3	1704.4	1619.0	1542.4	1538.9
37.5°	3804.5	2115.7	1617.3	1678.3	1725.3	1728.8	1690.5	1605.1	1561.5	1504.0	1497.0
40°	3910.8	2007.7	1568.5	1624.3	1653.9	1652.1	1608.6	1547.6	1577.2	1558.0	1552.8
42.5°	4085.1	1941.4	1528.4	1566.8	1587.7	1591.2	1556.3	1518.0	1582.4	1558.0	1549.3
45°	4365.6	1938.0	1500.5	1509.2	1542.4	1566.8	1542.4	1498.8	1523.2	1404.7	1382.0
47.5°	4698.5	1997.2	1479.6	1458.7	1516.2	1559.8	1521.4	1451.7	1401.2	1293.1	1277.5
50°	5099.3	2117.5	1460.4	1404.7	1477.9	1533.6	1495.3	1399.4	1322.8	1265.3	1256.5
52.5°	5575.1	2276.1	1436.0	1343.7	1420.4	1519.7	1495.3	1394.2	1293.1	1240.9	1232.1
55°	6073.6	2459.1	1408.2	1270.5	1355.9	1523.2	1507.5	1357.6	1270.5	1242.6	1235.6
57.5°	6692.2	2678.6	1357.6	1185.1	1298.4	1491.8	1458.7	1336.7	1254.8	1232.1	1225.2
60°	7495.7	3004.5	1261.8	1097.9	1232.1	1436.0	1415.1	1301.9	1213.0	1193.8	1188.6
62.5°	8767.9	3557.0	1145.0	1014.3	1153.7	1319.3	1350.6	1235.6	1160.7	1158.9	1157.2
65°	10841.8	4221.0	1007.3	939.4	1071.8	1223.4	1265.3	1167.7	1106.7	1125.8	1124.1
67.5°	12295.3	4278.5	894.0	860.9	976.0	1118.9	1179.9	1097.9	1031.7	1068.3	1066.6
70°	*11261.8*	*3337.4*	*796.4*	*779.0*	*873.1*	*1005.6*	*1087.5*	*1010.8*	*944.6*	*979.4*	*972.5*
72.5°	9498.1	2558.4	704.1	693.6	768.6	887.1	969.0	923.7	854.0	854.0	838.3
75°	7633.3	2110.5	606.5	601.3	651.8	766.8	859.2	782.5	718.0	714.5	704.1
77.5°	4377.8	1383.8	508.9	505.4	521.1	641.3	667.5	651.8	603.0	580.3	573.4
80°	1744.5	719.8	400.8	378.2	393.9	470.5	526.3	500.2	458.3	430.5	414.8
82.5°	676.2	360.8	282.3	247.5	270.1	339.8	381.7	373.0	345.1	282.3	264.9
85°	275.4	176.0	169.0	142.9	156.8	183.0	219.6	190.0	156.8	111.5	106.3
87.5°	73.2	64.5	62.7	38.3	29.6	8.7	1.7	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

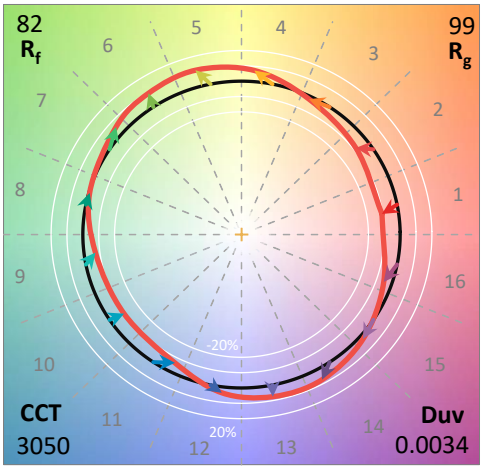
Test Information

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

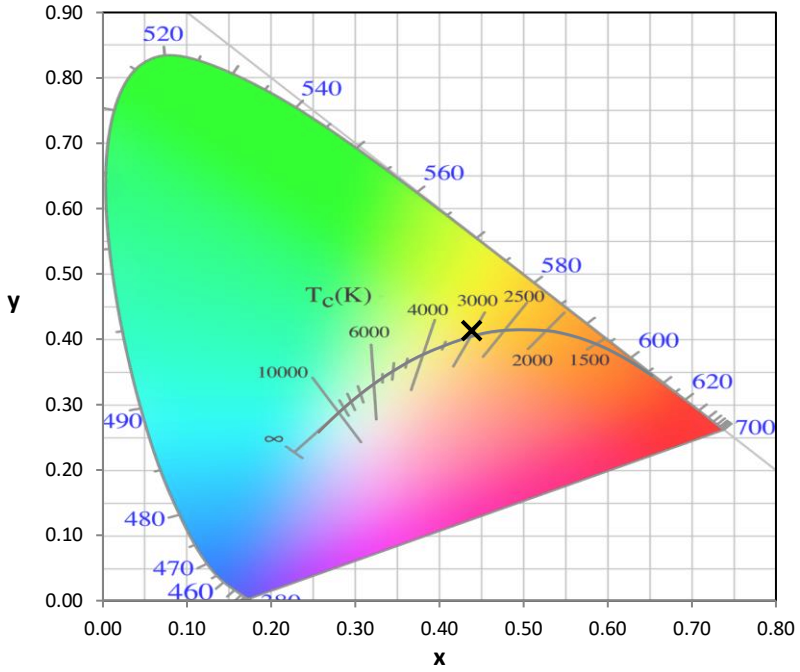
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

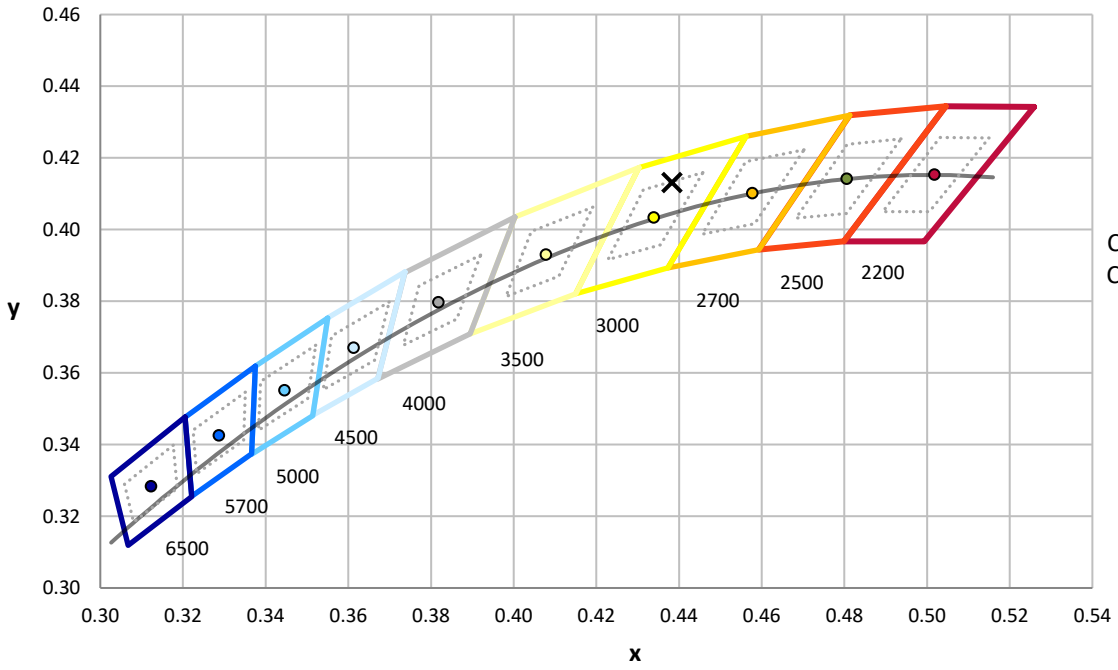
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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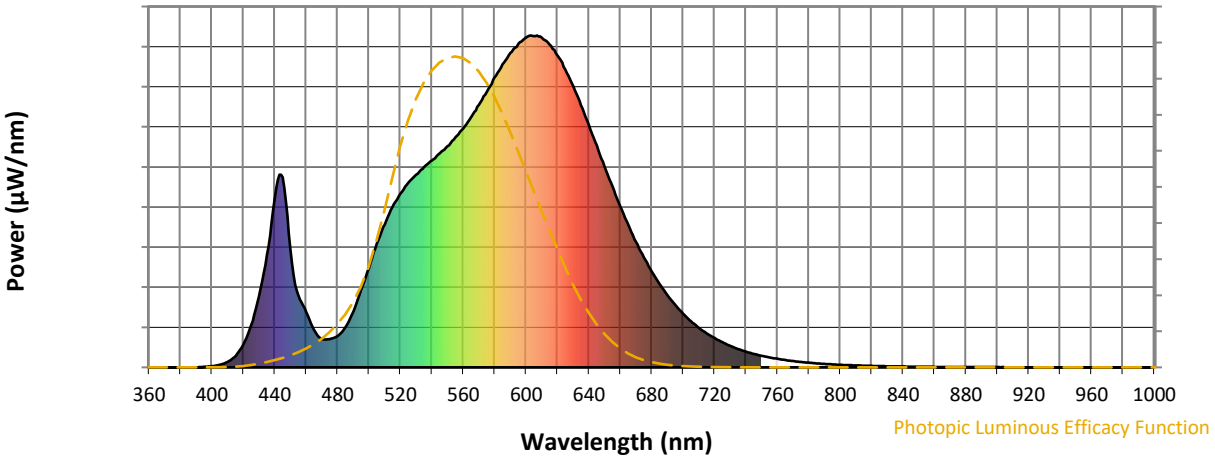
Photopic Flux vs. Wavelength



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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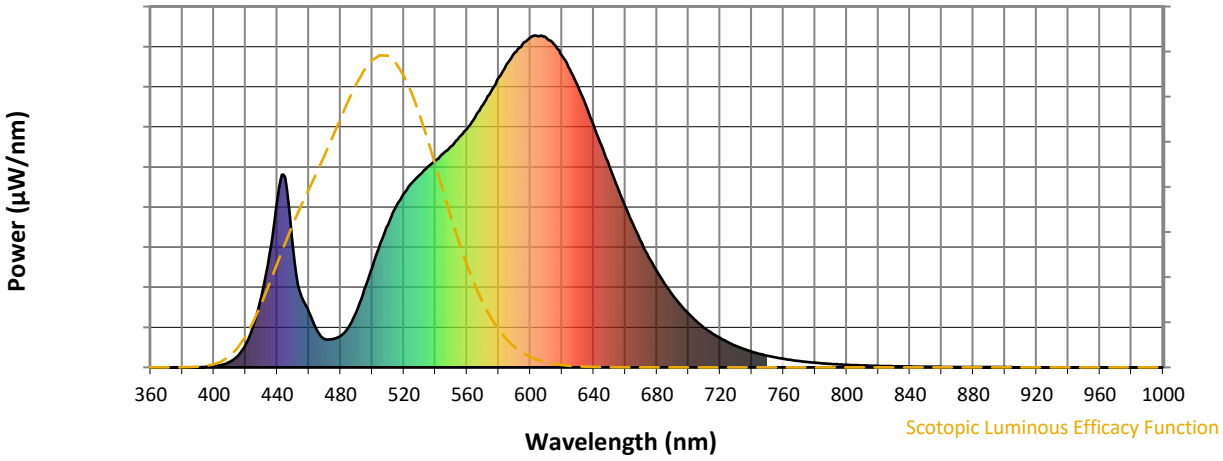
Scotopic Flux vs. Wavelength



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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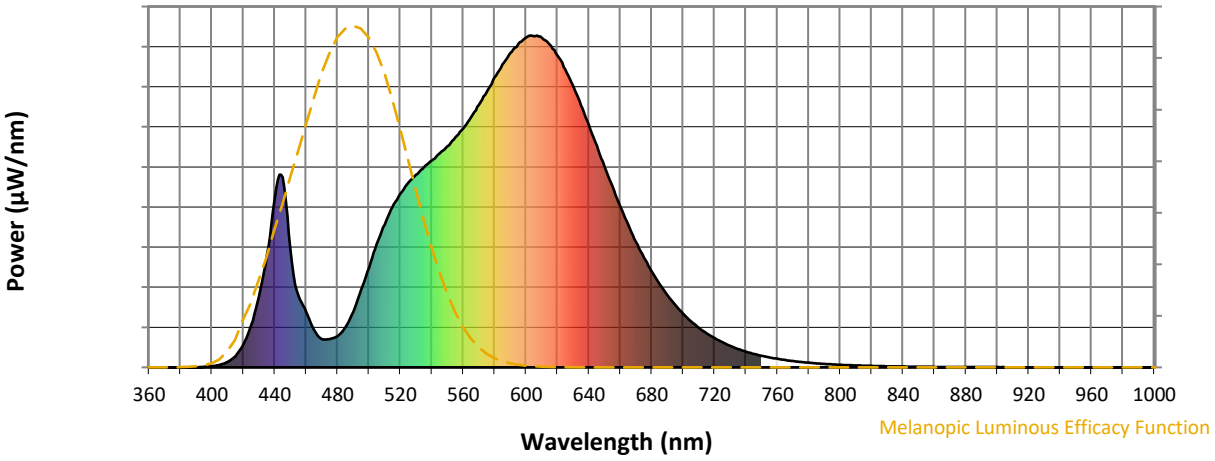
Melanopic Flux vs. Wavelength



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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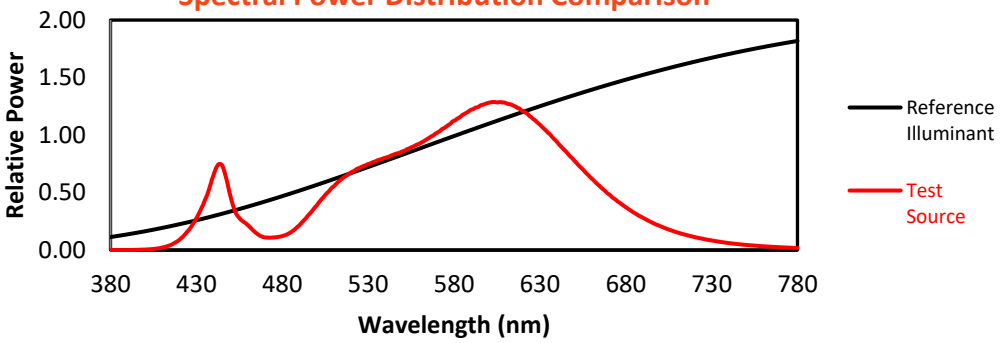
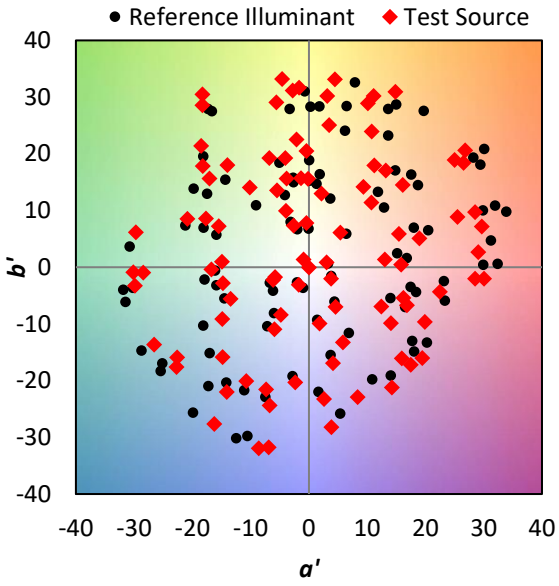
Summary

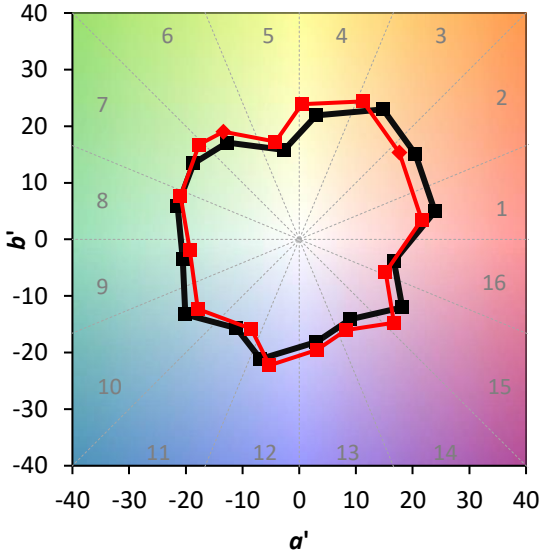
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

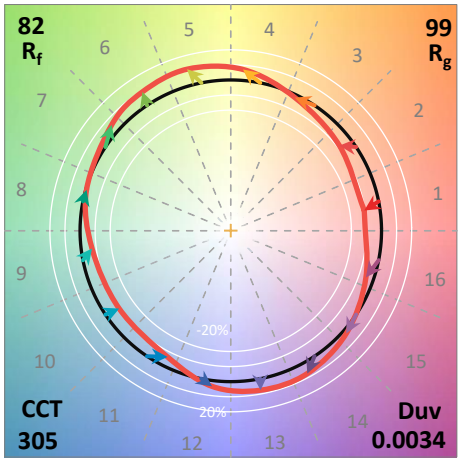
Spectral Power Distribution Comparison

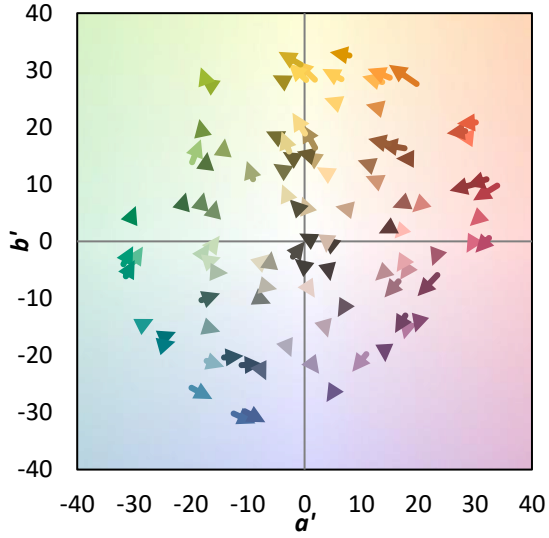


Color Vector Graphics









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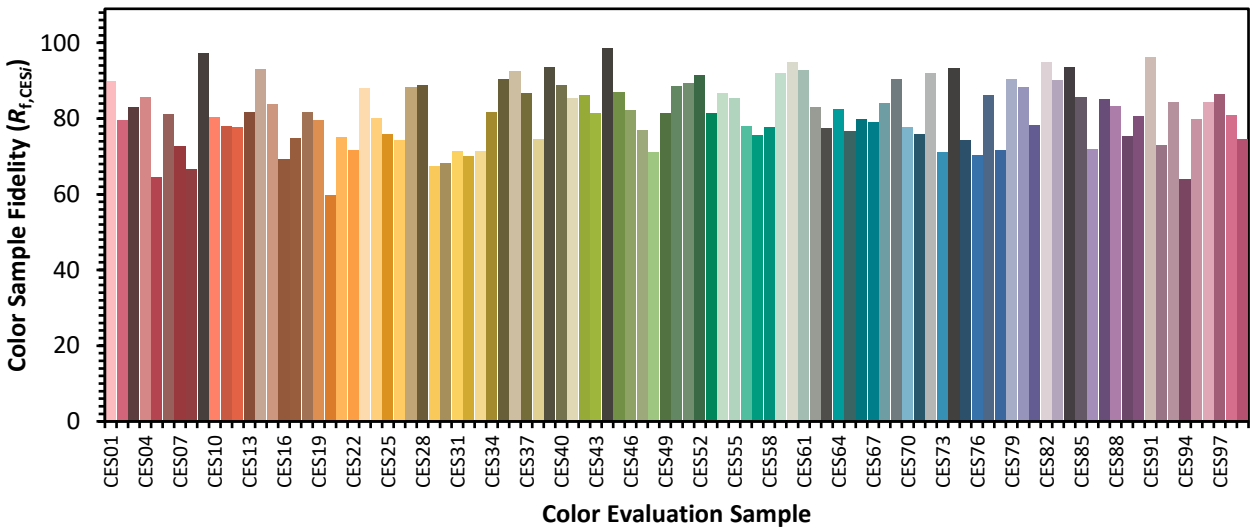
Individual Sample Fidelity Index ($R_{f,i}$)

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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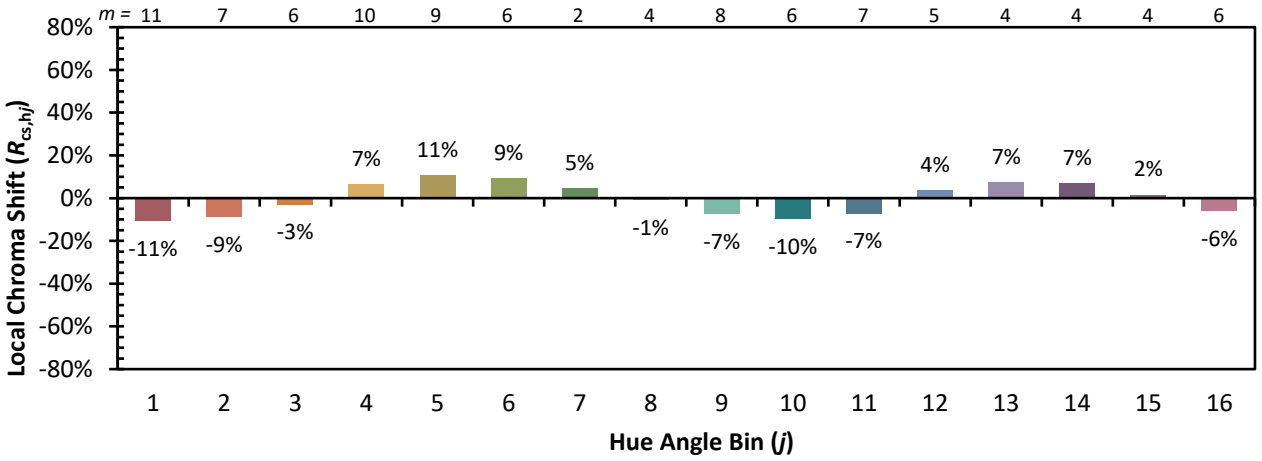
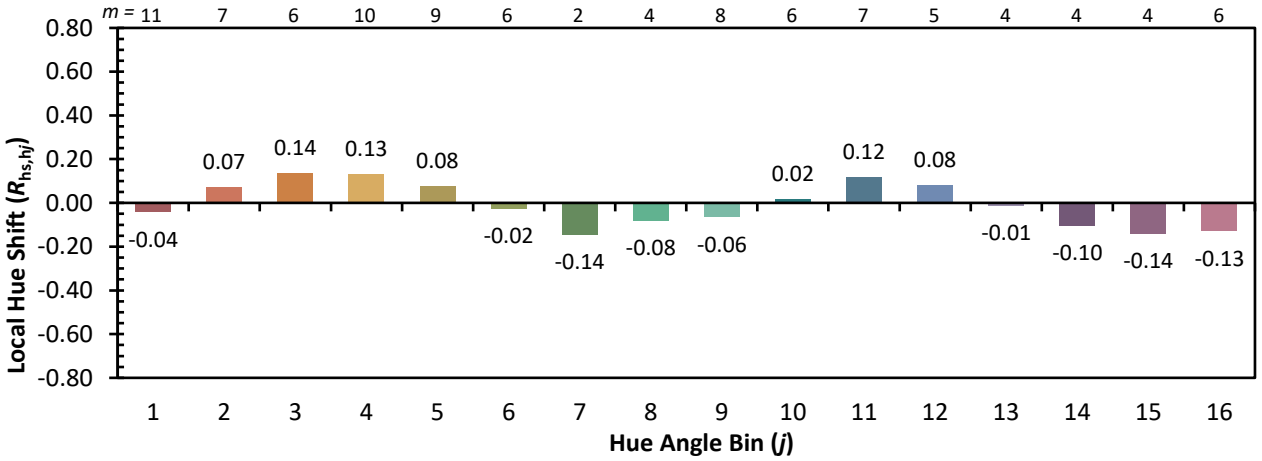
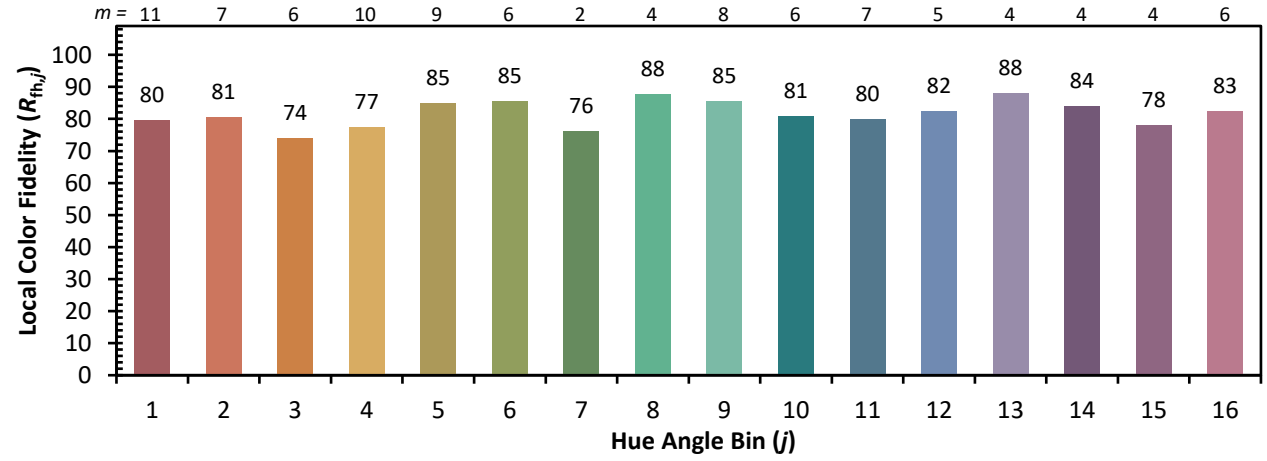
Color Rendition by Hue-Angle Bin







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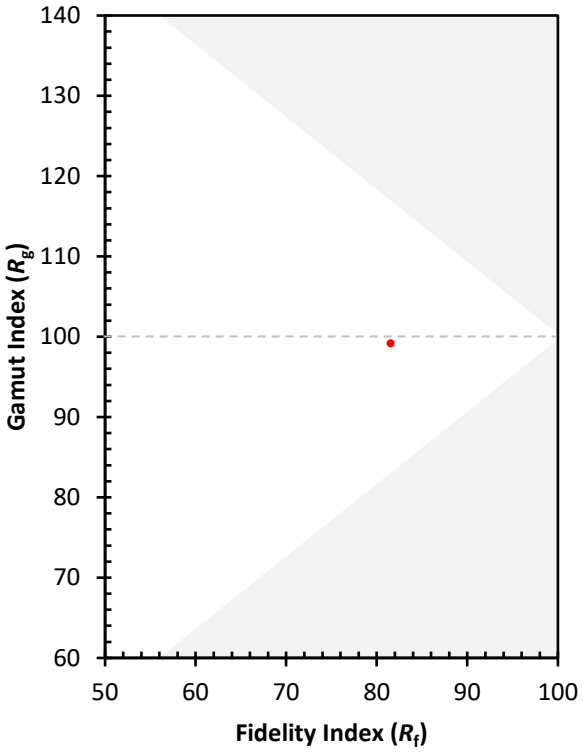
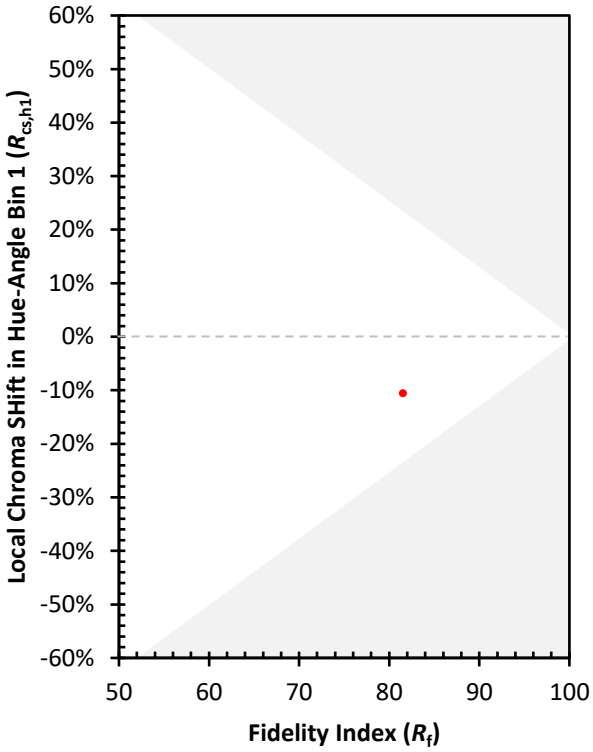
Measure Comparisons





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