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: P636013

Luminaire Tested: GWS-SA3E-830-U-T2-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:	P636013
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-20)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3E-830-U-T2-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	10377.1 lumens
Efficiency:	N/A
Efficacy:	65.2 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

Input Watts (W):	159.2
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: P636013
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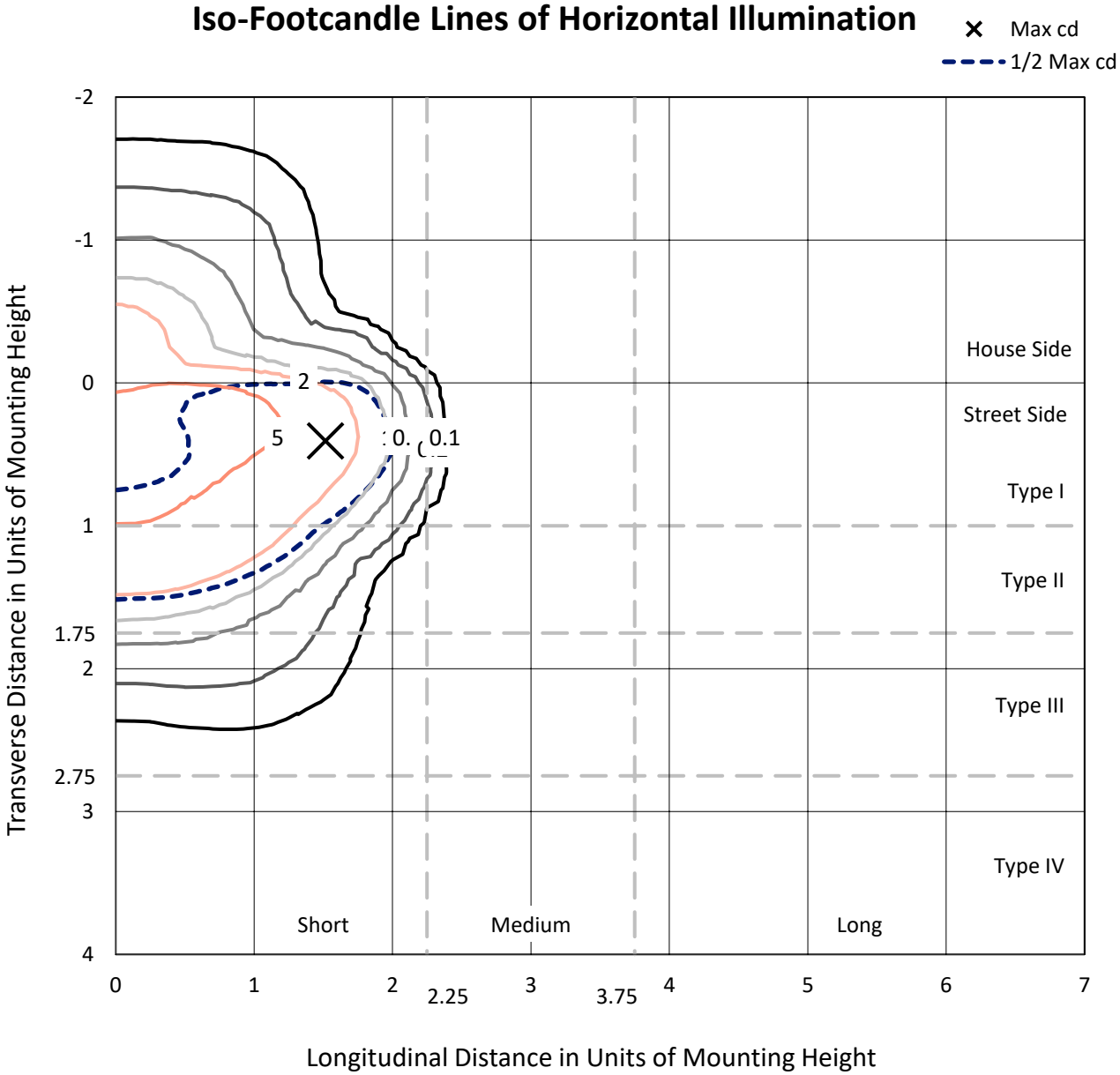
Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 8.1 fc
Type II - Short - N/A

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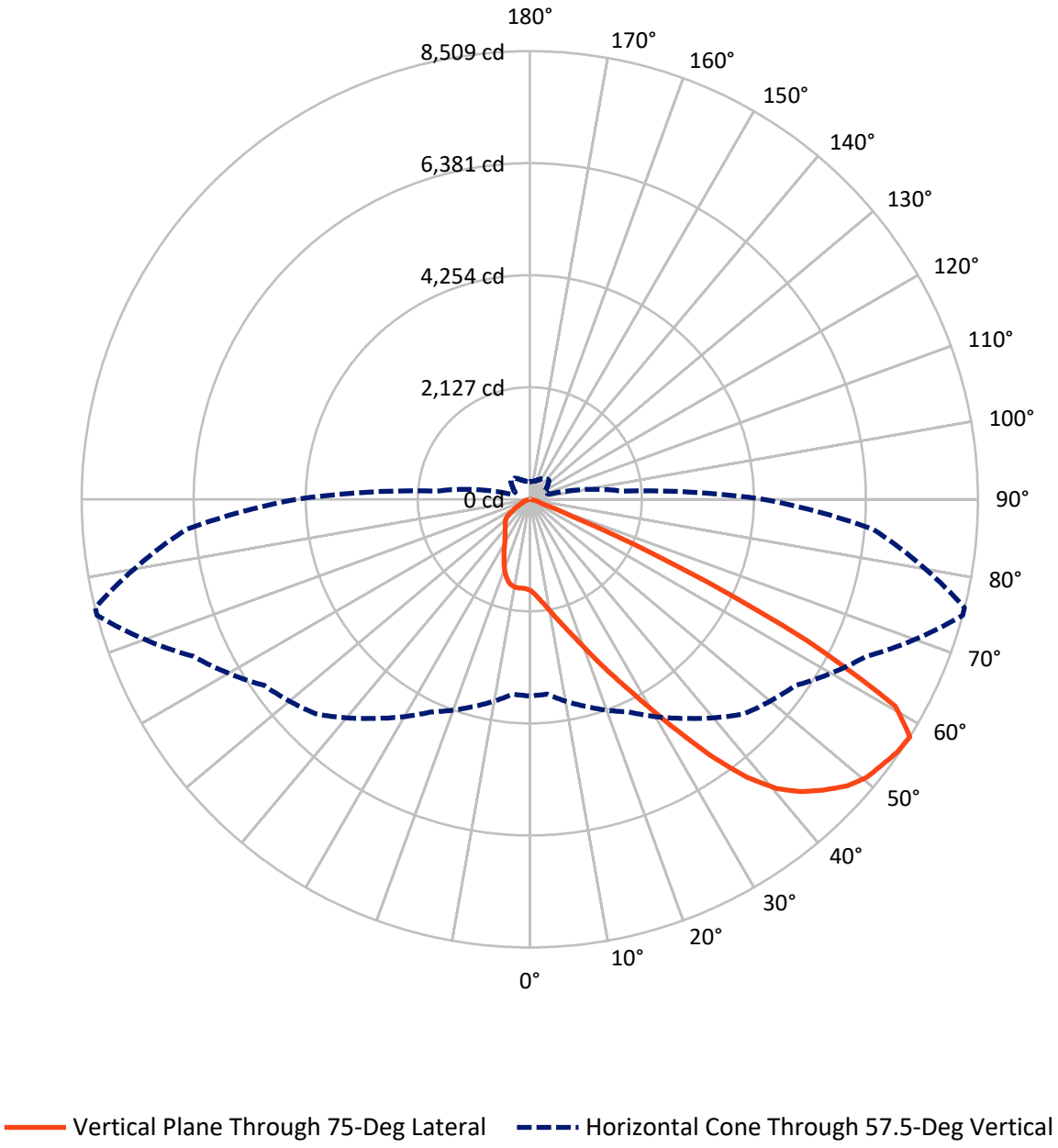
Luminous Intensity Polar Plot



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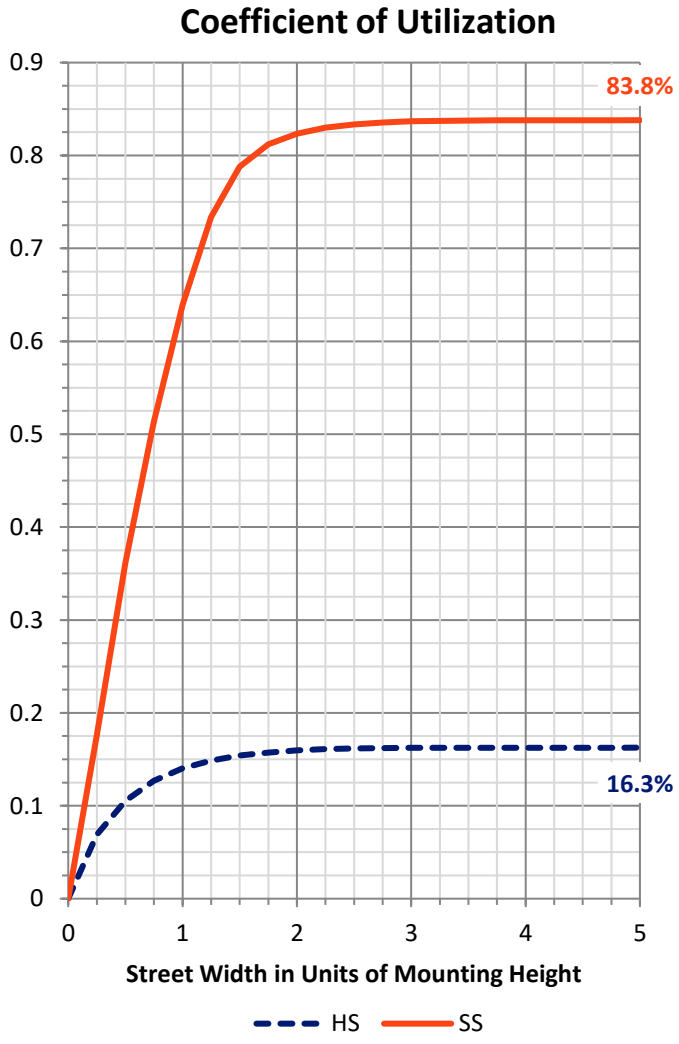
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1695.1	0.0	1695.1
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	8682.0	0.0	8682.0
	% Fixture	83.7	0.0	83.7
Total	Lumens	10377.1	0.0	10377.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.1	1.7
10°-20°	572.1	5.5
20°-30°	1047.7	10.1
30°-40°	1738.2	16.8
40°-50°	2654.6	25.6
50°-60°	2982.9	28.7
60°-70°	1100.2	10.6
70°-80°	105.2	1.0
80°-90°	0.1	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°	10377.1	100.0
0°-180°	10377.1	100.0



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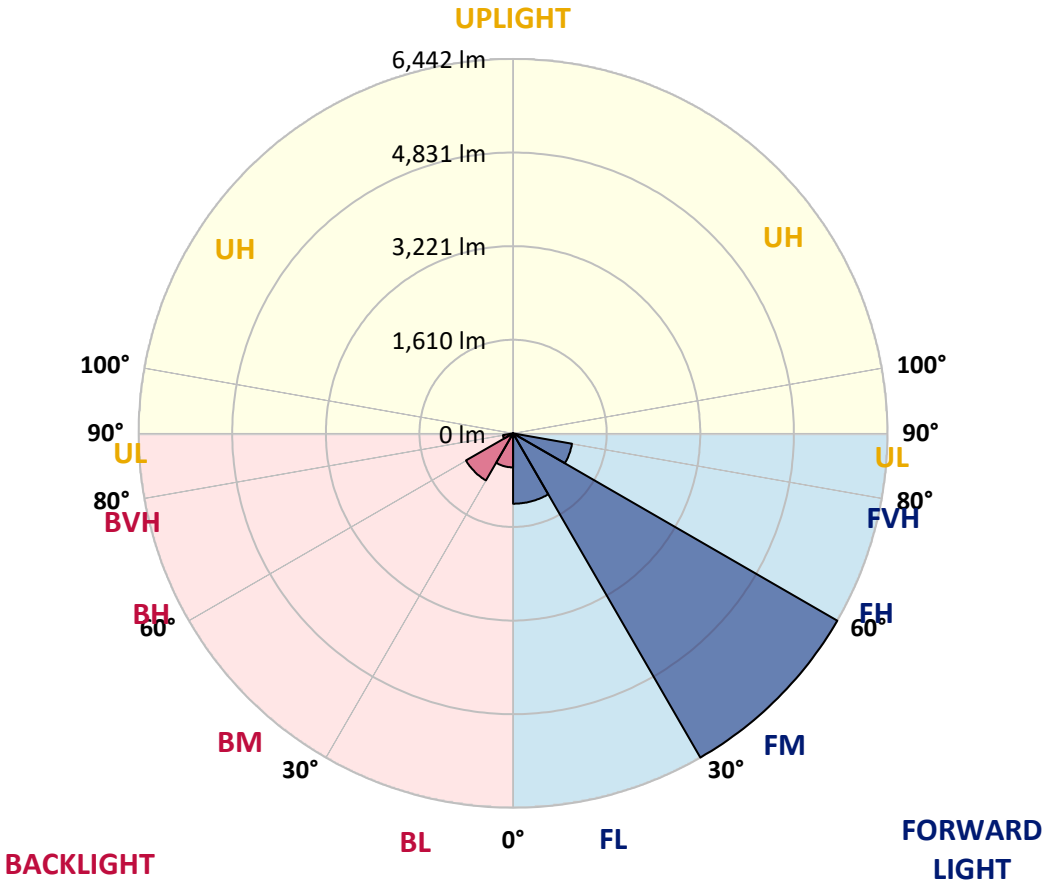
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1211.0	11.7			
FM	(30°-60°)	6441.6	62.1			
FH	(60°-80°)	1029.4	9.9			G1/1800
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	584.9	5.6	B2/1000		
BM	(30°-60°)	934.1	9.0	B1/1000		
BH	(60°-80°)	176.0	1.7	B1/500		G1/500
BVH	(80°-90°)	0.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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REPORT NUMBER: P636013
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1730.8	1730.8	1730.8	1730.8	1730.8	1730.8	1730.8	1730.8	*1730.8*	1730.8	1730.8
2.5°	1933.6	1953.7	1947.4	1934.9	1927.4	1901.1	1884.8	1837.2	*1803.4*	1799.6	1768.3
5°	2177.8	2174.1	2169.1	2154.1	2141.5	2100.2	2051.4	1971.2	*1899.8*	1891.1	1824.7
7.5°	2311.8	2314.4	2316.9	2314.4	2305.6	2274.3	2220.4	2126.5	*2017.5*	2010.0	1904.8
10°	2367.0	2372.0	2384.5	2408.3	2429.6	2427.1	2395.8	2299.3	*2165.3*	2152.8	2011.3
12.5°	2393.3	2399.5	2419.6	2464.6	2522.2	2567.3	2572.3	2485.9	*2338.1*	2318.1	2137.8
15°	2429.6	2435.8	2460.9	2519.7	2603.6	2692.6	2750.2	2695.1	*2529.8*	2508.5	2276.8
17.5°	2445.9	2454.6	2490.9	2568.6	2677.5	2814.0	2944.3	2939.3	*2756.4*	2740.2	2438.3
20°	2477.2	2483.4	2516.0	2599.9	2731.4	2928.0	3147.2	3226.1	*3033.2*	3009.4	2633.7
22.5°	2576.1	2578.6	2593.6	2646.2	2769.0	3010.7	3353.8	3560.4	*3360.1*	3328.8	2852.9
25°	2737.6	2736.4	2742.7	2751.4	2841.6	3094.6	3552.9	3937.4	*3734.5*	3700.7	3100.8
27.5°	2943.0	2943.0	2958.1	2933.0	2969.3	3198.5	3749.6	4370.7	*4170.3*	4122.8	3372.6
30°	3184.7	3183.5	3218.6	3178.5	3189.8	3362.6	3961.2	4842.9	*4696.3*	4637.5	3685.7
32.5°	3512.9	3505.3	3545.4	3490.3	3452.7	3610.5	4219.2	5336.3	*5326.3*	5236.1	4078.9
35°	3927.4	3914.9	3927.4	3873.5	3805.9	3957.4	4557.3	5828.5	*6025.1*	5929.9	4547.3
37.5°	4339.4	4379.5	4393.3	4300.6	4245.5	4397.0	4964.3	6269.3	*6692.6*	6593.7	5034.5
40°	4825.3	4812.8	4860.4	4756.4	4721.4	4889.2	5362.6	6597.4	*7221.1*	7127.2	5467.8
42.5°	5183.5	5206.0	5264.9	5207.3	5179.7	5337.5	5697.0	6789.0	*7588.0*	7495.3	5777.1
45°	5613.1	5629.3	5651.9	5604.3	5575.5	5730.8	5938.7	6872.9	*7867.3*	7767.1	5985.0
47.5°	6077.7	6090.2	6090.2	5992.5	5899.8	5963.7	6100.2	6920.5	*8124.0*	8027.6	6139.0
50°	6410.8	6417.1	6472.2	6403.3	6201.7	6102.7	6174.1	6966.9	*8294.4*	8204.2	6189.1
52.5°	6115.3	6107.7	6289.3	6432.1	6486.0	6289.3	6301.9	7034.5	*8377.0*	8299.4	6229.2
55°	5149.7	5137.2	5392.6	5739.5	6214.2	6465.9	6455.9	7074.6	*8468.4*	8420.8	6374.5
57.5°	*3733.3*	*3712.0*	*4067.7*	*4453.4*	*5075.8*	*5758.3*	*6159.1*	*7052.0*	*8508.5*	*8504.7*	*6543.6*
60°	2244.2	2226.7	2562.3	2968.1	3449.0	4135.3	4800.3	6316.9	*7972.5*	7980.0	6104.0
62.5°	1381.3	1397.6	1700.7	1907.3	2086.4	2293.1	2677.5	4249.2	*5906.1*	5955.0	4289.3
65°	929.2	941.8	1222.3	1482.8	1482.8	1212.3	1040.7	2031.3	*3150.9*	3068.3	2028.8
67.5°	623.7	637.4	859.1	1163.4	1207.3	845.3	422.0	606.1	*877.9*	851.6	502.2
70°	366.9	382.0	572.3	797.8	879.2	588.6	281.8	256.7	*249.2*	241.7	195.4
72.5°	164.1	170.3	291.8	405.8	370.7	248.0	199.1	205.4	*194.1*	190.4	159.0
75°	50.1	52.6	75.1	87.7	88.9	88.9	120.2	161.6	*152.8*	154.0	122.7
77.5°	12.5	12.5	20.0	18.8	10.0	8.8	22.5	36.3	*37.6*	33.8	25.0
80°	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	*1.3*	1.3	1.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0
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: P636013
CATALOG NUMBER: GWS-SA3E-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1730.8	1730.8	1730.8	1730.8	1730.8	1730.8	1730.8	1730.8	1730.8	1730.8	1730.8
2.5°	1754.6	1722.0	1700.7	1670.6	1649.4	1626.8	1606.8	1590.5	1581.7	1579.2	1580.5
5°	1794.6	1743.3	1693.2	1635.6	1595.5	1557.9	1527.9	1504.1	1492.8	1489.1	1489.1
7.5°	1856.0	1784.6	1695.7	1605.5	1537.9	1479.0	1444.0	1417.7	1407.6	1405.1	1397.6
10°	1936.1	1838.5	1691.9	1551.7	1456.5	1395.1	1370.1	1362.6	1366.3	1367.6	1366.3
12.5°	2032.6	1894.8	1668.1	1472.8	1370.1	1332.5	1335.0	1355.0	1377.6	1388.9	1391.4
15°	2135.3	1946.2	1614.3	1378.8	1296.2	1294.9	1331.3	1377.6	1421.4	1440.2	1445.2
17.5°	2250.5	1987.5	1531.6	1278.7	1232.3	1268.6	1333.8	1405.1	1464.0	1495.3	1501.6
20°	2377.0	2021.3	1426.4	1184.7	1176.0	1241.1	1331.3	1418.9	1491.6	1526.6	1532.9
22.5°	2508.5	2045.1	1305.0	1098.3	1124.6	1209.8	1307.5	1392.6	1461.5	1501.6	1506.6
25°	2658.8	2047.6	1181.0	1025.7	1077.0	1167.2	1249.9	1320.0	1377.6	1412.7	1416.4
27.5°	2790.2	2017.5	1070.8	966.8	1033.2	1114.6	1169.7	1208.5	1248.6	1268.6	1269.9
30°	2941.8	1964.9	966.8	919.2	988.1	1049.5	1077.0	1085.8	1089.5	1093.3	1088.3
32.5°	3122.1	1901.1	889.2	872.9	936.8	978.1	985.6	968.1	946.8	916.7	909.2
35°	3343.8	1843.5	825.3	827.8	880.4	905.5	899.2	861.6	820.3	784.0	777.7
37.5°	3584.2	1794.6	776.5	784.0	819.0	836.6	817.8	776.5	757.7	726.4	727.6
40°	3797.1	1754.6	732.6	740.1	756.4	772.7	742.6	715.1	750.2	747.7	750.2
42.5°	3948.7	1720.7	695.1	691.3	702.6	713.8	691.3	677.5	736.4	720.1	728.9
45°	4037.6	1689.4	663.7	641.2	658.7	678.8	663.7	646.2	666.3	591.1	584.9
47.5°	4097.7	1671.9	636.2	592.4	623.7	658.7	627.4	584.9	556.0	490.9	485.9
50°	4104.0	1663.1	603.6	542.3	582.3	619.9	583.6	524.7	483.4	454.6	450.8
52.5°	4136.5	1680.7	558.6	478.4	522.2	582.3	557.3	498.4	442.1	417.0	412.0
55°	4281.8	1754.6	483.4	390.7	454.6	553.5	536.0	444.6	390.7	375.7	371.9
57.5°	*4432.1*	*1769.6*	*380.7*	*309.3*	*395.7*	*512.2*	*489.7*	*409.5*	*356.9*	*339.4*	*335.6*
60°	4052.6	1457.7	285.5	255.5	349.4	473.4	453.4	388.2	326.9	305.6	301.8
62.5°	2662.5	787.7	226.7	216.7	294.3	400.8	413.3	350.7	291.8	269.3	268.0
65°	1227.3	365.7	174.1	171.6	230.4	319.4	355.7	306.8	246.7	226.7	226.7
67.5°	334.4	181.6	136.5	126.5	156.5	214.2	259.2	229.2	175.3	151.5	150.3
70°	166.6	146.5	122.7	109.0	112.7	132.7	152.8	127.7	88.9	72.6	71.4
72.5°	136.5	120.2	103.9	92.7	85.2	81.4	78.9	63.9	41.3	31.3	30.1
75°	101.4	86.4	73.9	60.1	51.3	47.6	42.6	31.3	17.5	10.0	8.8
77.5°	22.5	21.3	20.0	15.0	13.8	11.3	8.8	6.3	2.5	0.0	0.0
80°	1.3	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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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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

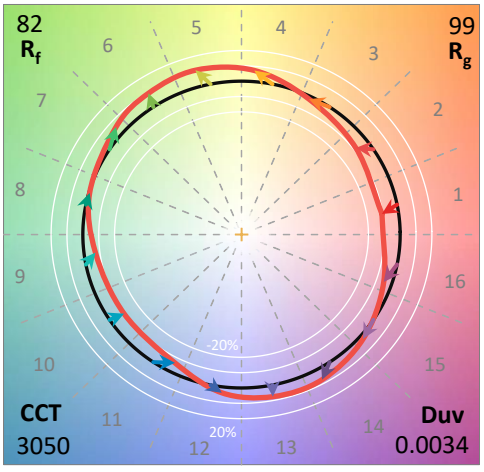
Test Information

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

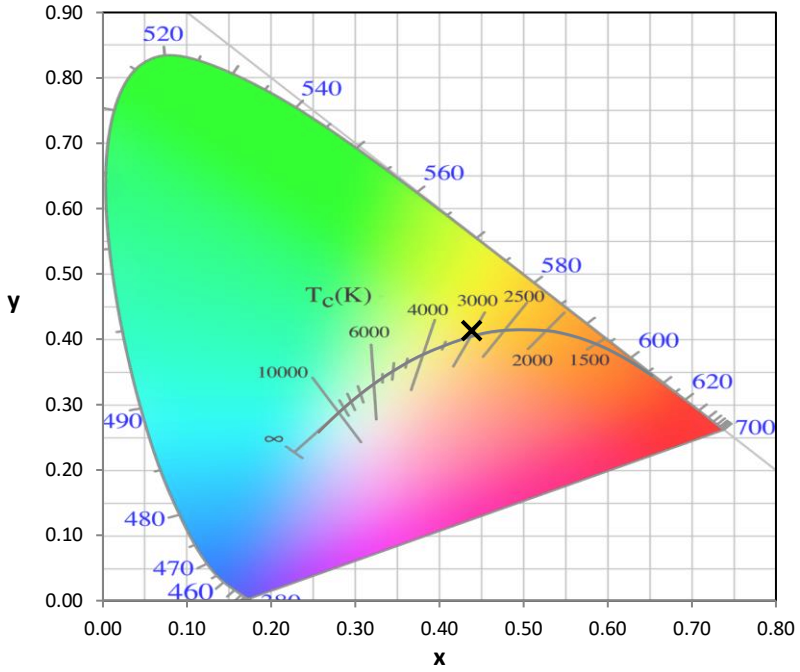
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

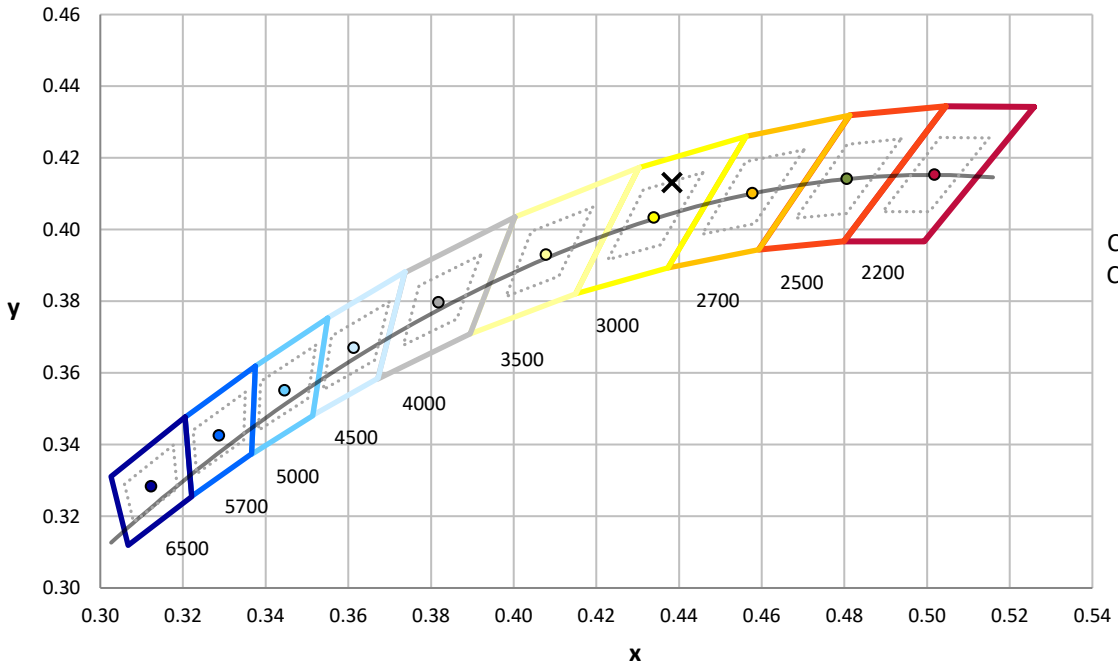
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

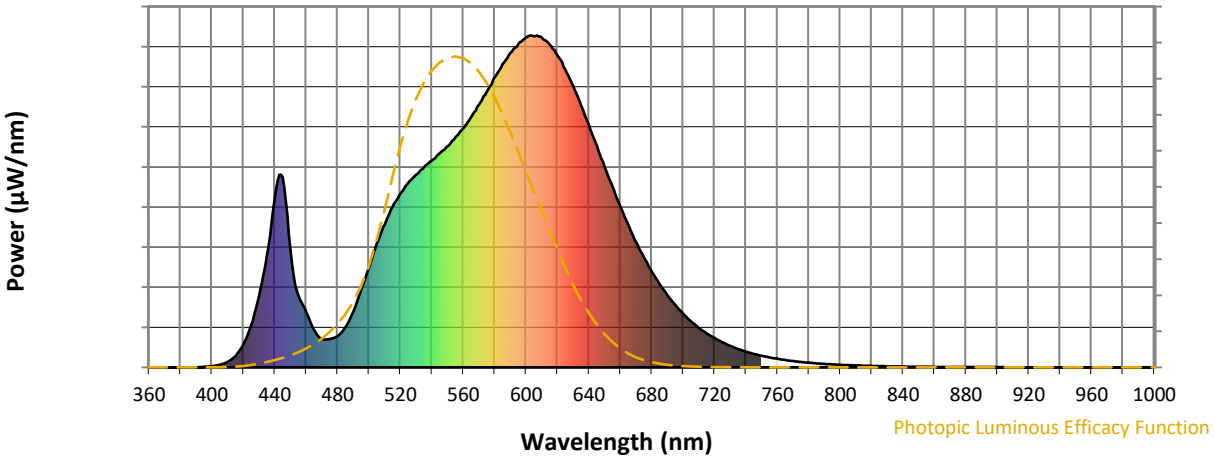


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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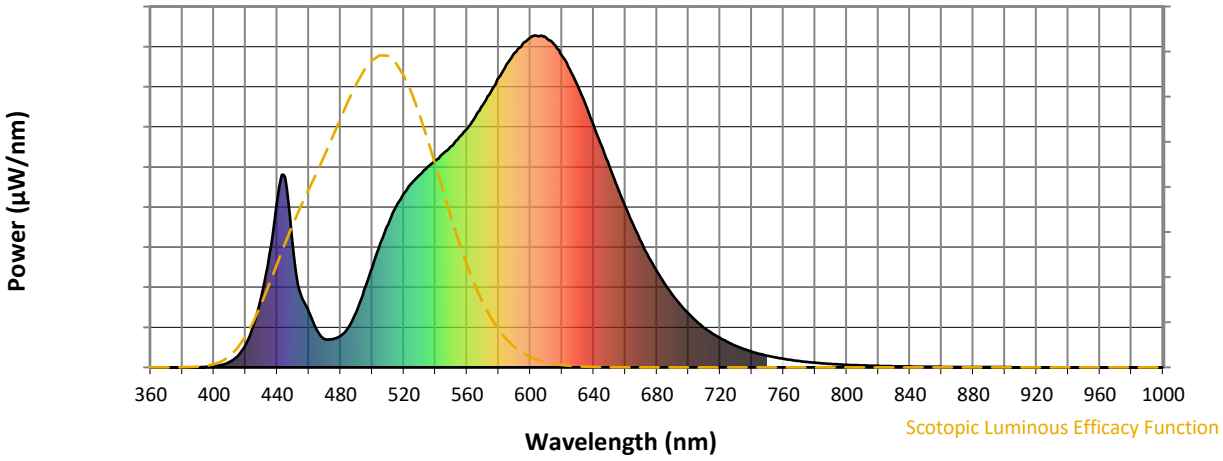
Scotopic Flux vs. Wavelength



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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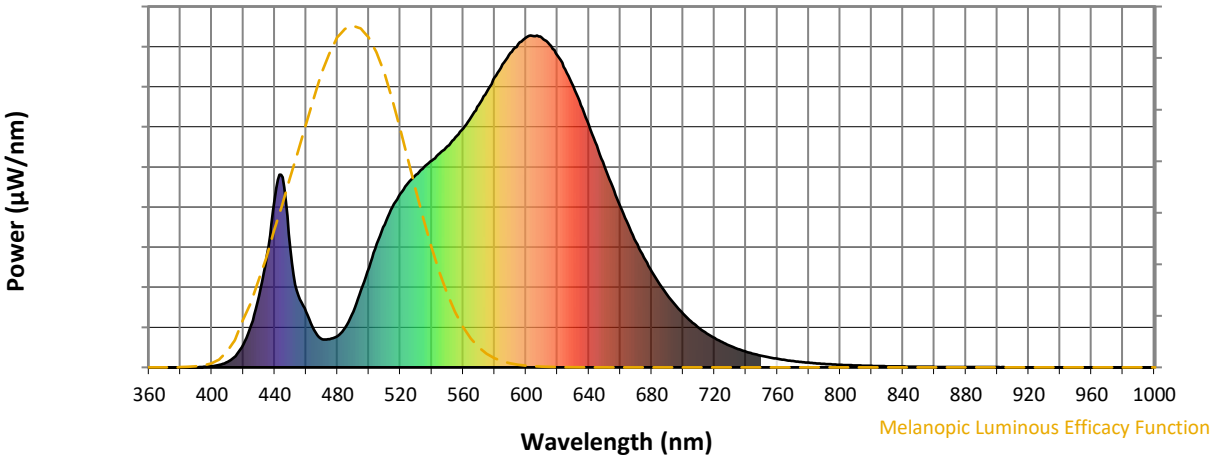
Melanopic Flux vs. Wavelength



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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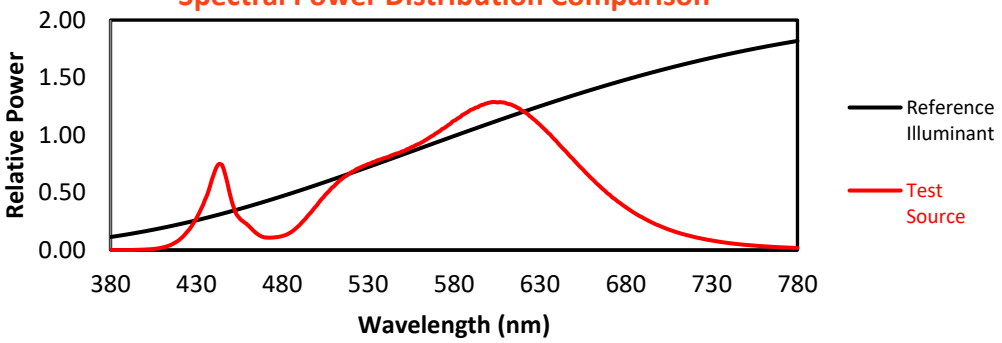
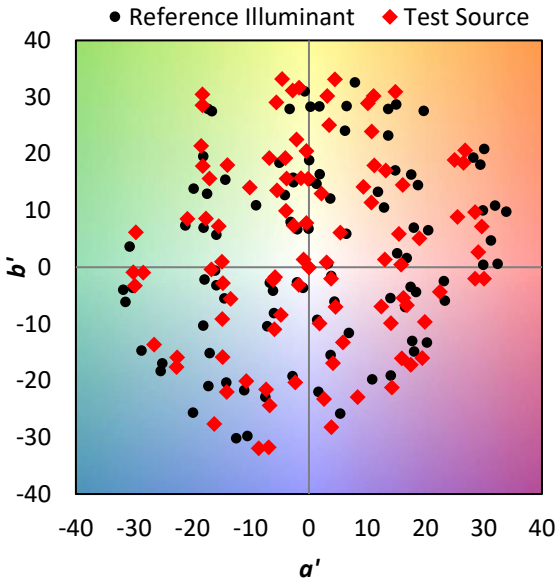
Summary

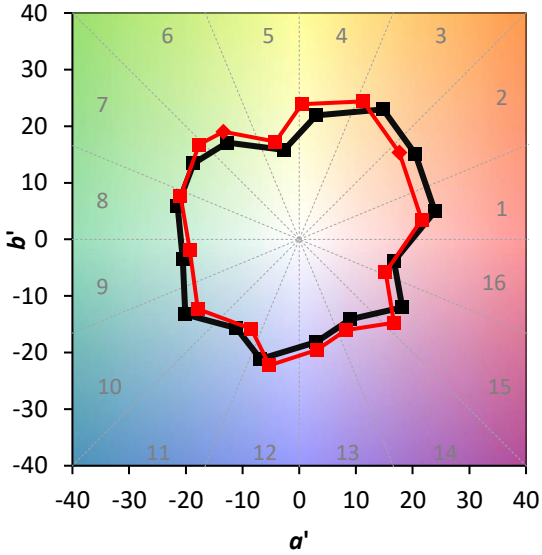
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

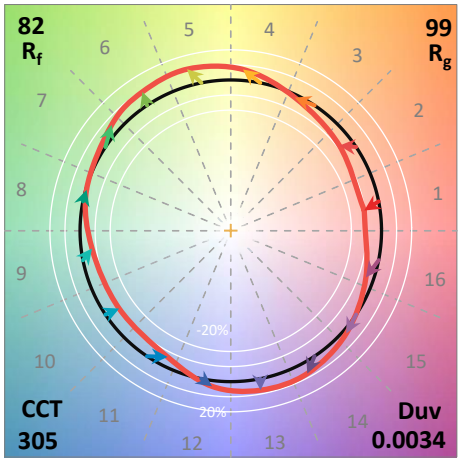
Spectral Power Distribution Comparison

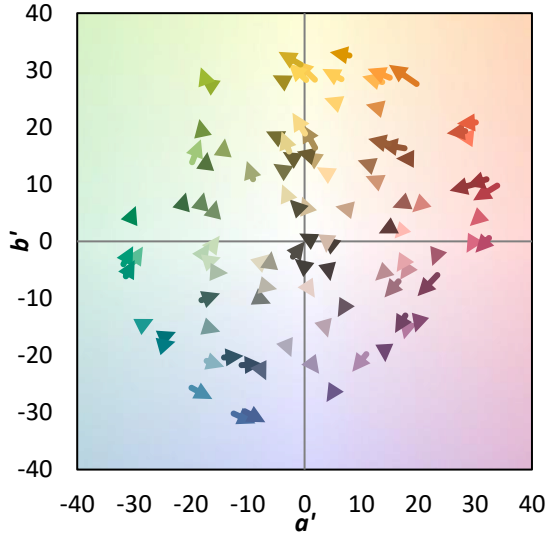


Color Vector Graphics









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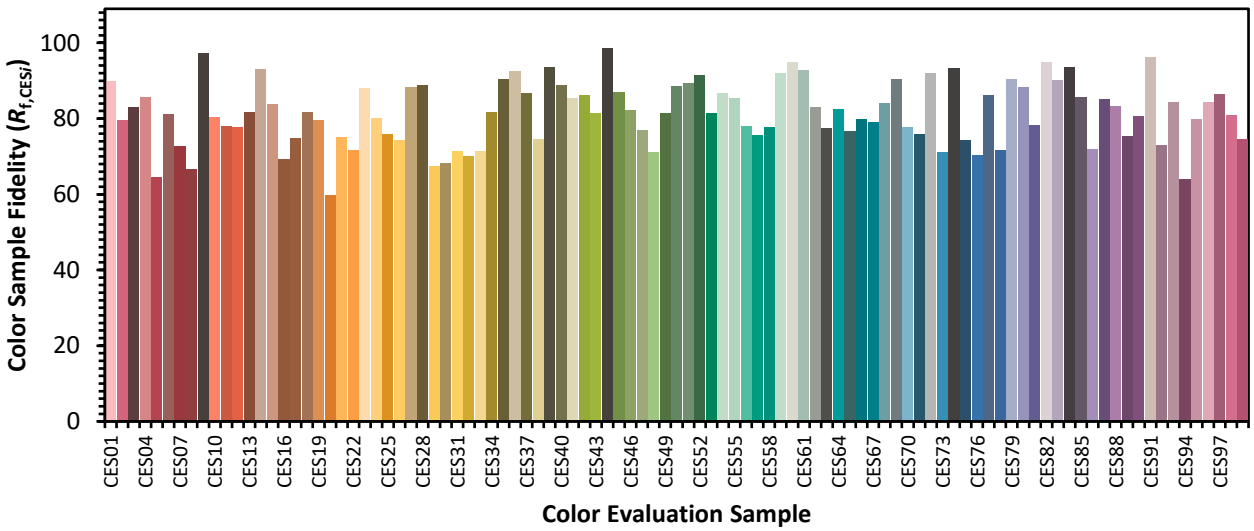
Individual Sample Fidelity Index ($R_{f,i}$)

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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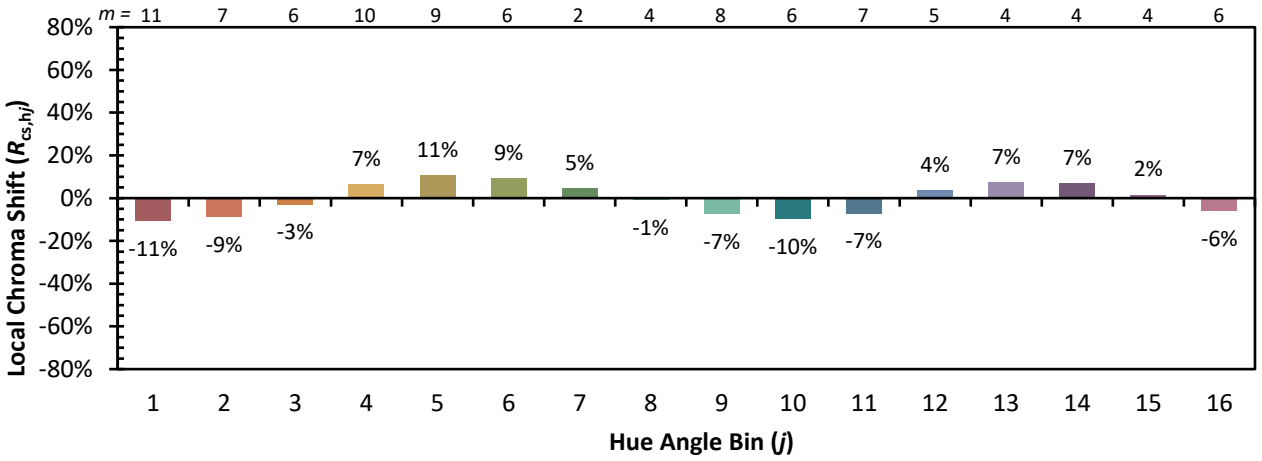
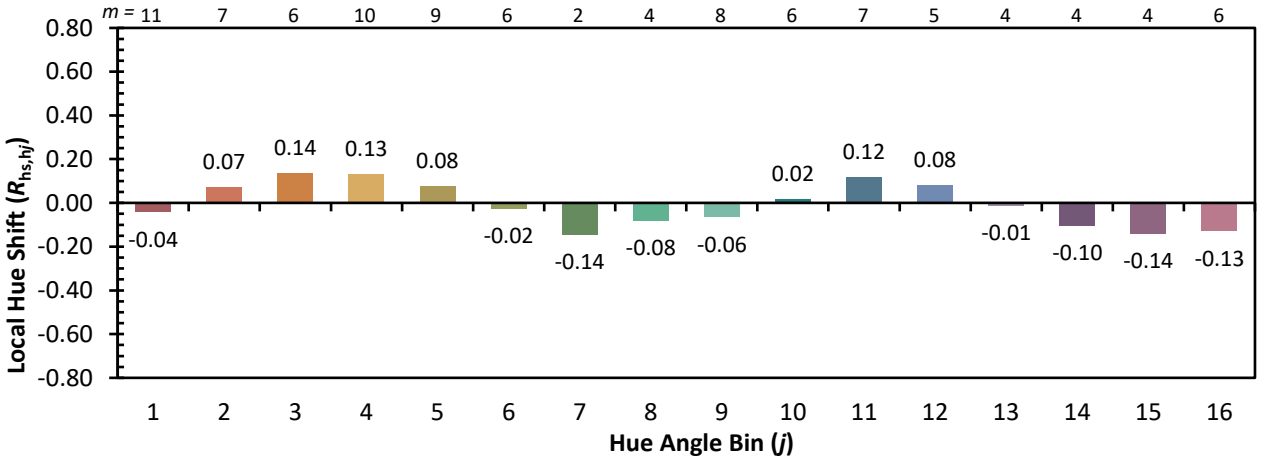
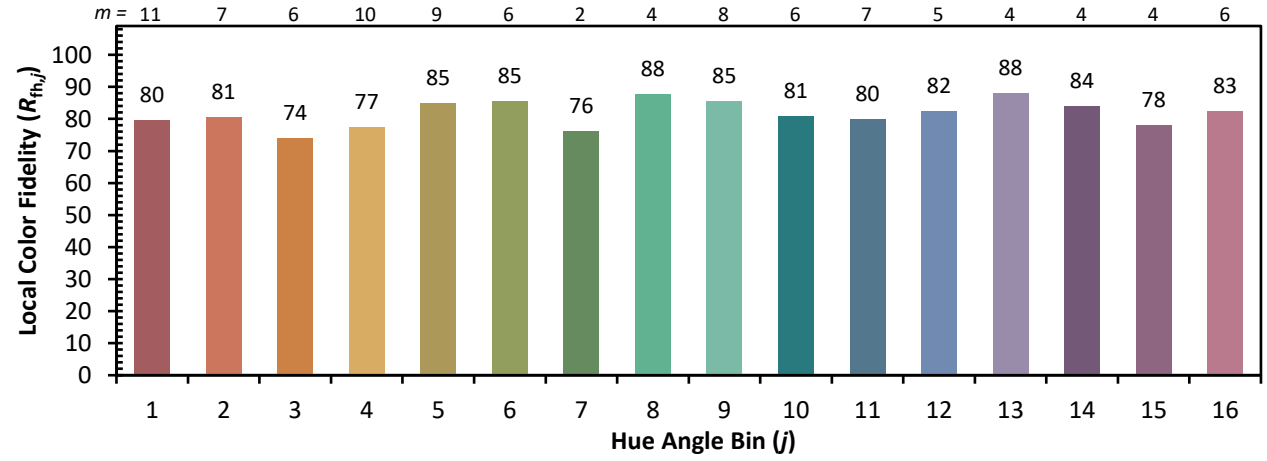
Color Rendition by Hue-Angle Bin







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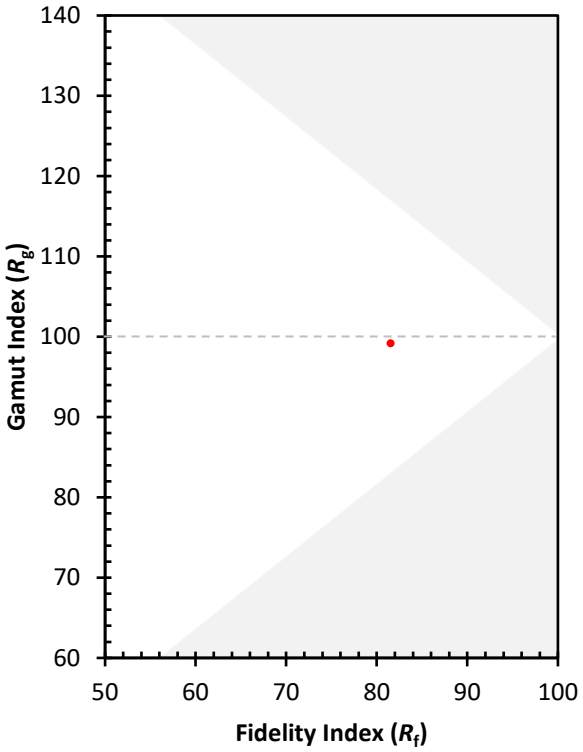
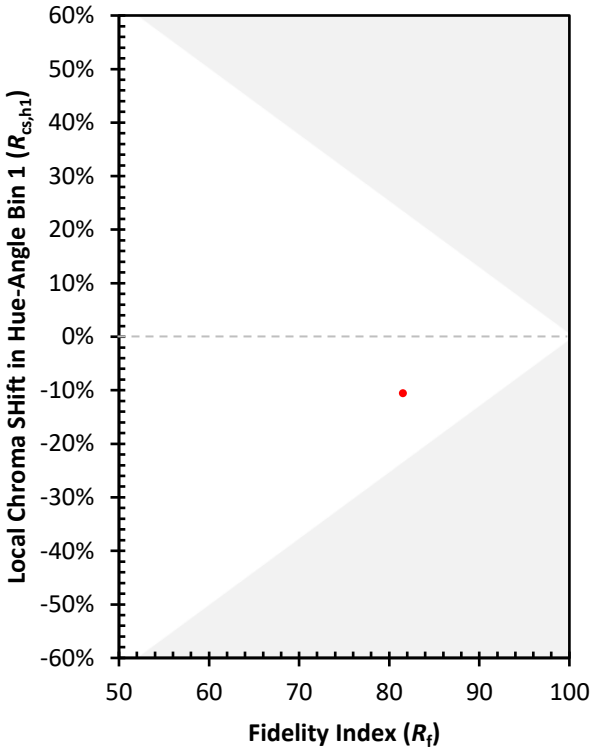
Measure Comparisons





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