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: P641433

Luminaire Tested: GWS-SA5F-830-U-AFL-W-GRSWH

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:	P641433
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-47)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5F-830-U-AFL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	30079.6 lumens
Efficiency:	N/A
Efficacy:	96.9 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G2

Input Watts (W):	310.3
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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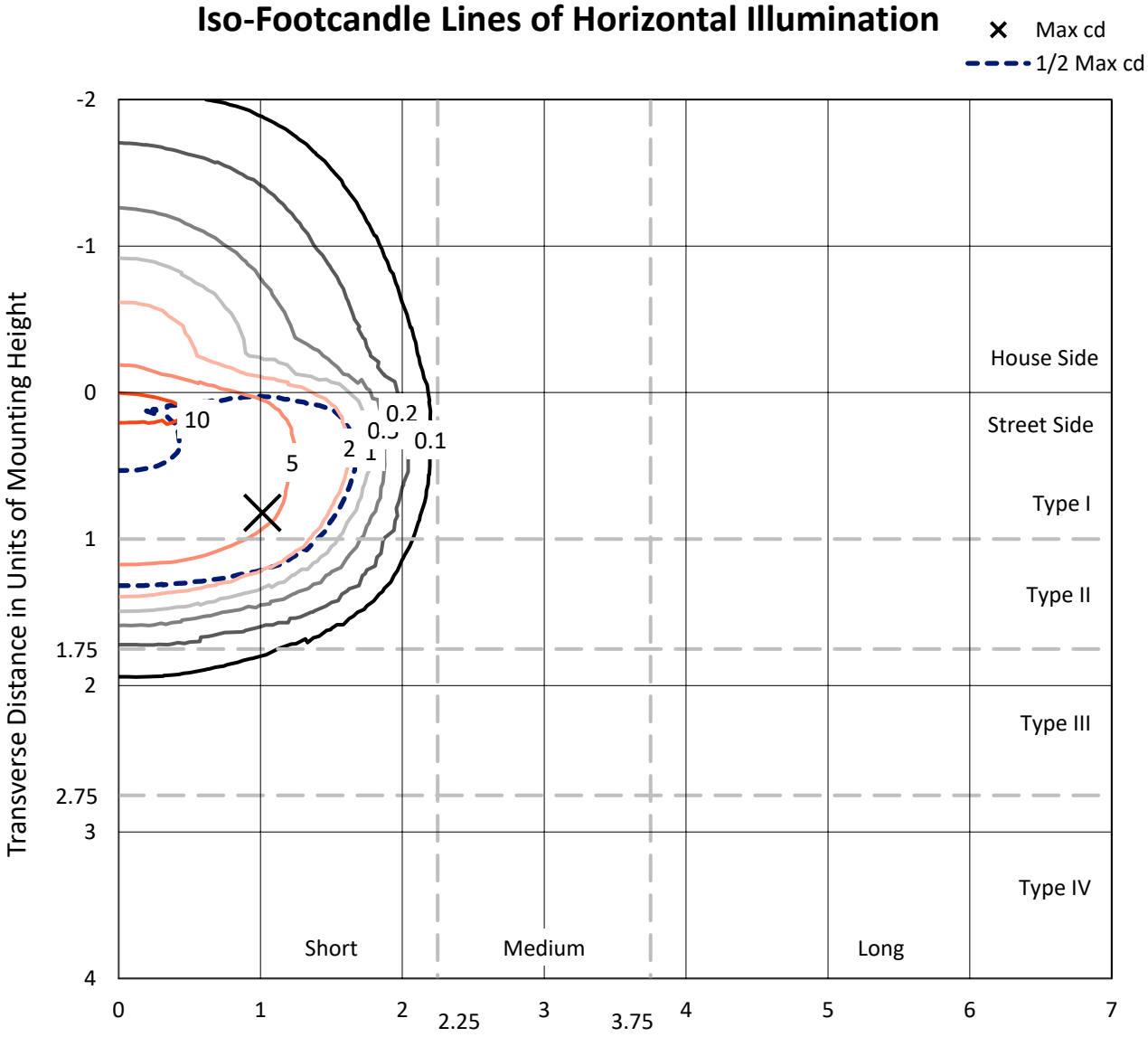
Scaled Data Report

REPORT NUMBER: P641433
CATALOG NUMBER: GWS-SA5F-830-U-AFL-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 30 foot mounting height. Maximum calculated value = 12.2 fc
Type II - Short - N/A

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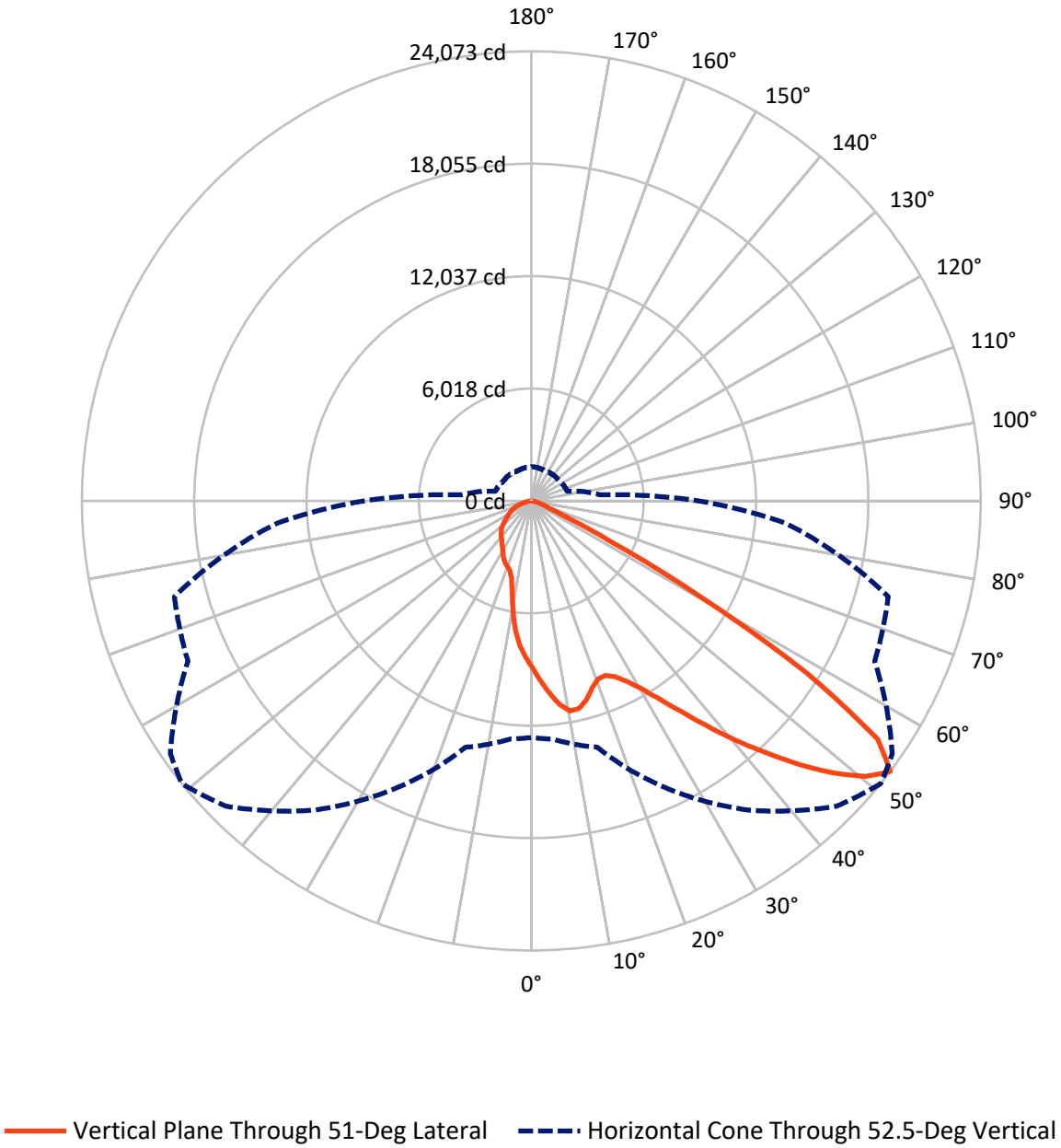
Luminous Intensity Polar Plot



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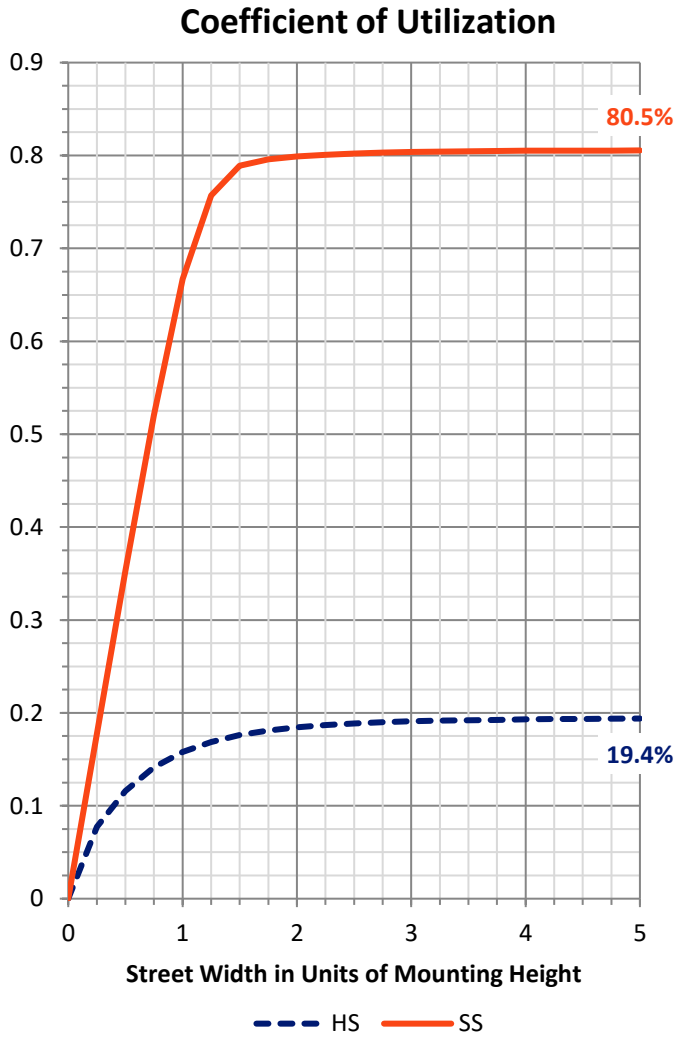
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5860.8	0.0	5860.8
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	24218.8	0.0	24218.8
	% Fixture	80.5	0.0	80.5
Total	Lumens	30079.6	0.0	30079.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	835.7	2.8
10°-20°	2171.6	7.2
20°-30°	3530.8	11.7
30°-40°	5595.5	18.6
40°-50°	8439.3	28.1
50°-60°	7300.6	24.3
60°-70°	1655.1	5.5
70°-80°	488.0	1.6
80°-90°	62.9	0.2
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°	30079.6	100.0
0°-180°	30079.6	100.0



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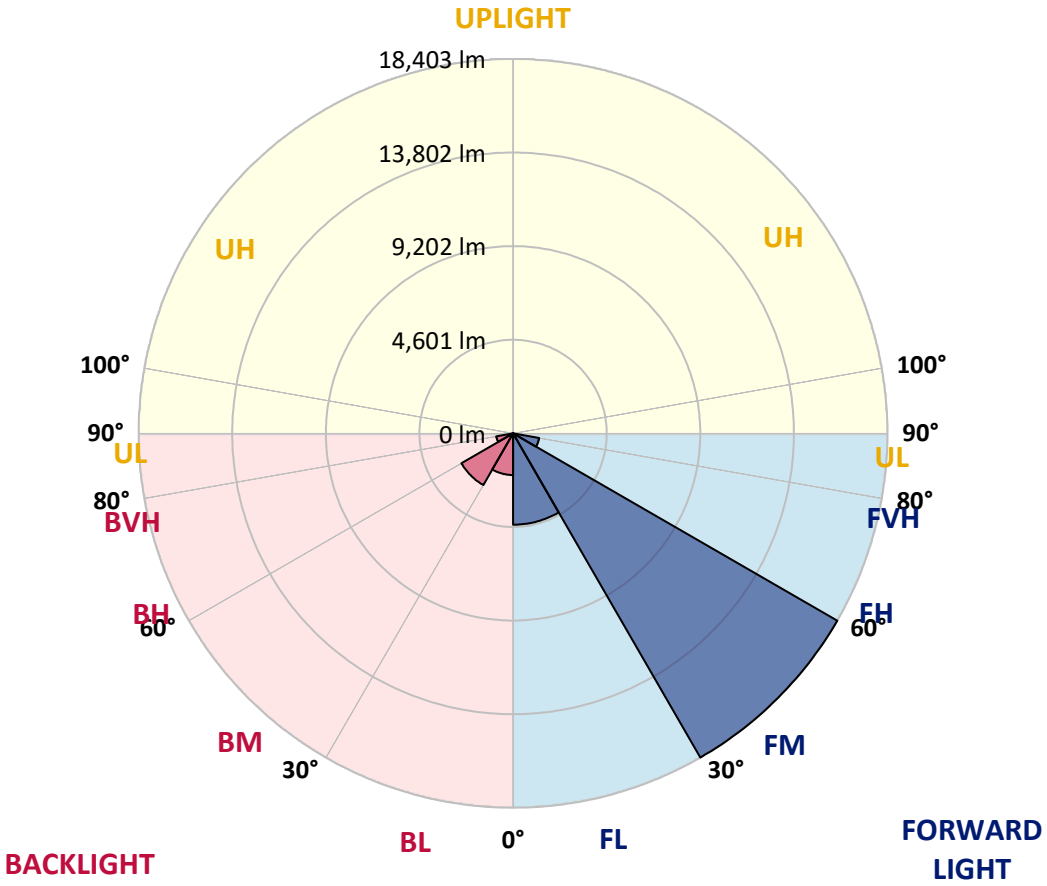
REPORT NUMBER: P641433
CATALOG NUMBER: GWS-SA5F-830-U-AFL-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	4489.5	14.9			
FM	(30°-60°)	18403.1	61.2			
FH	(60°-80°)	1302.6	4.3			G1/1800
FVH	(80°-90°)	23.7	0.1			G1/100
BL	(0°-30°)	2048.7	6.8	B3/2500		
BM	(30°-60°)	2932.3	9.7	B3/5000		
BH	(60°-80°)	840.6	2.8	B2/1000		G2/1000
BVH	(80°-90°)	39.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2
Type II Short



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REPORT NUMBER: P641433
CATALOG NUMBER: GWS-SA5F-830-U-AFL-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	51°	55°	65°	75°	85°
0°	8956.2	8956.2	8956.2	8956.2	8956.2	8956.2	*8956.2*	8956.2	8956.2	8956.2	8956.2
2.5°	9980.6	10037.7	9949.7	9916.5	9861.8	9766.7	*9657.4*	9626.5	9391.2	9236.7	9063.2
5°	10983.7	11014.6	10943.3	10872.0	10736.5	10567.7	*10356.2*	10311.0	9883.2	9529.0	9160.6
7.5°	11207.1	11195.2	11257.0	11297.5	11280.8	11214.3	*11026.5*	10938.5	10427.5	9866.6	9322.2
10°	10322.9	10256.4	10484.6	10755.5	11081.2	11456.7	*11435.3*	11428.2	10983.7	10320.5	9529.0
12.5°	9151.1	9117.8	9303.2	9643.1	10258.7	11090.7	*11402.0*	11644.5	11485.2	10753.1	9759.6
15°	8480.8	8468.9	8594.9	8839.7	9329.4	10380.0	*11045.5*	11525.6	11915.5	11216.6	10004.4
17.5°	8359.6	8366.7	8409.5	8549.7	8901.5	9766.7	*10536.8*	11207.1	12250.6	11725.3	10311.0
20°	8713.8	8761.3	8687.6	8709.0	8899.2	9545.7	*10189.8*	10886.2	12464.5	12236.3	10641.4
22.5°	9500.5	9483.9	9322.2	9227.2	9229.5	9681.2	*10151.8*	10736.5	12604.8	12733.1	10940.9
25°	10391.9	10372.8	10180.3	9968.8	9835.7	10049.6	*10425.1*	10895.8	12730.7	13187.1	11181.0
27.5°	11444.8	11385.4	11171.5	10900.5	10605.8	10698.5	*10952.8*	11326.0	12925.6	13634.0	11340.2
30°	12464.5	12533.4	12226.8	11905.9	11594.6	11537.5	*11684.9*	12022.4	13322.6	14156.9	11530.4
32.5°	13817.0	13793.2	13453.3	13035.0	12590.5	12547.7	*12664.2*	12973.2	14035.7	14879.5	11820.4
35°	15454.7	15459.4	14976.9	14411.2	13778.9	13664.9	*13859.8*	14159.3	15098.1	15858.7	12279.1
37.5°	17156.5	17149.4	16728.7	16086.9	15224.1	15062.5	*15285.9*	15509.3	16426.8	17192.2	12992.2
40°	18349.7	18397.3	18200.0	17862.5	17044.8	16650.3	*16847.5*	17002.0	17872.0	18761.0	13931.1
42.5°	19027.2	19098.5	19141.3	19343.3	18913.1	18492.4	*18421.1*	18501.9	19162.7	20218.0	14812.9
45°	19172.2	19267.2	19578.6	20327.3	20493.7	20374.9	*20141.9*	19947.0	20125.3	21252.0	15390.5
47.5°	18532.8	18699.2	19364.7	20674.4	21646.5	22019.7	*21760.6*	21463.5	20681.5	21518.2	15331.1
50°	15999.0	16193.9	17693.7	19966.0	21810.5	23170.1	*23193.9*	22754.2	20614.9	20750.4	14584.7
52.5°	*12666.6*	*12799.7*	*13657.7*	*16926.0*	*20201.4*	*23122.6*	*24073.3*	*23602.7*	*20294.1*	*19790.2*	*13650.6*
55°	7570.5	7784.4	8585.4	11166.7	15737.5	20493.7	*22518.8*	22747.0	20137.2	18984.4	13013.6
57.5°	2555.2	2659.8	3425.1	4932.1	9274.7	15005.4	*17399.0*	18326.0	18280.8	17753.1	11770.5
60°	1217.0	1240.7	1395.2	1870.6	3712.7	7841.4	*10299.2*	11368.8	12343.3	12440.7	7323.3
62.5°	927.0	941.3	1019.7	1121.9	1492.7	3303.9	*4720.5*	5538.2	5916.1	5077.1	2666.9
65°	774.9	786.8	846.2	910.4	1014.9	1430.9	*1811.2*	2089.3	1882.5	1466.6	1271.6
67.5°	646.5	656.0	701.2	770.1	841.4	957.9	*1005.4*	1034.0	1083.9	1217.0	1169.4
70°	506.3	515.8	563.3	622.8	691.7	720.2	*765.4*	793.9	893.7	1064.9	1060.1
72.5°	389.8	401.7	427.8	465.9	522.9	551.4	*601.4*	634.6	691.7	829.5	886.6
75°	285.2	292.4	316.1	328.0	335.1	328.0	*377.9*	416.0	492.0	544.3	558.6
77.5°	116.5	130.7	126.0	126.0	149.7	180.6	*206.8*	230.6	282.9	313.8	316.1
80°	47.5	52.3	61.8	68.9	83.2	107.0	*123.6*	133.1	156.9	175.9	190.2
82.5°	28.5	30.9	35.7	38.0	47.5	61.8	*71.3*	78.4	97.5	116.5	123.6
85°	14.3	14.3	16.6	19.0	23.8	28.5	*33.3*	38.0	49.9	61.8	68.9
87.5°	2.4	2.4	2.4	4.8	7.1	9.5	*11.9*	14.3	16.6	19.0	23.8
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: P641433
CATALOG NUMBER: GWS-SA5F-830-U-AFL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8956.2	8956.2	8956.2	8956.2	8956.2	8956.2	8956.2	8956.2	8956.2	8956.2	8956.2
2.5°	8961.0	8832.6	8682.9	8564.0	8426.1	8323.9	8178.9	8088.6	8003.1	7931.7	7879.5
5°	8970.5	8754.2	8442.8	8167.1	7881.8	7610.9	7332.8	7107.0	6904.9	6736.2	6721.9
7.5°	9025.1	8713.8	8226.5	7744.0	7187.8	6650.6	6113.4	5676.1	5343.3	5169.8	5134.1
10°	9117.8	8709.0	8005.4	7235.3	6286.9	5421.7	4784.7	4452.0	4259.4	4190.5	4166.7
12.5°	9215.3	8697.1	7722.6	6517.5	5200.7	4442.4	4093.0	4052.6	4088.3	4093.0	4090.7
15°	9334.1	8690.0	7366.0	5676.1	4406.8	3988.5	4012.2	4097.8	4181.0	4200.0	4200.0
17.5°	9479.1	8673.3	6881.2	4853.7	3910.0	3900.5	4026.5	4140.6	4219.0	4233.3	4233.3
20°	9631.2	8630.6	6284.6	4183.4	3708.0	3845.8	3981.3	4069.3	4123.9	4143.0	4145.3
22.5°	9735.8	8516.5	5597.6	3686.6	3582.0	3741.3	3838.7	3929.0	3929.0	3881.5	3867.2
25°	9757.2	8271.6	4853.7	3346.7	3432.3	3579.6	3679.5	3627.2	3529.7	3491.7	3489.3
27.5°	9678.8	7915.1	4119.2	3104.2	3251.6	3399.0	3382.3	3306.3	3263.5	3225.5	3239.7
30°	9583.7	7487.3	3482.2	2904.6	3042.4	3187.4	3130.4	3104.2	3073.3	3030.6	3040.1
32.5°	9519.5	7009.5	2992.5	2750.1	2902.2	2926.0	2966.4	2964.0	2935.5	2854.7	2849.9
35°	9538.5	6527.0	2664.5	2624.1	2785.7	2776.2	2852.3	2838.0	2640.7	2529.0	2521.9
37.5°	9690.7	6063.5	2472.0	2524.3	2600.3	2659.8	2726.3	2555.2	2486.2	2414.9	2419.7
40°	9980.6	5633.3	2367.4	2469.6	2488.6	2576.6	2422.1	2419.7	2388.8	2324.6	2322.2
42.5°	10308.7	5269.6	2296.1	2443.5	2417.3	2434.0	2269.9	2289.0	2286.6	2246.2	2234.3
45°	10508.3	4934.5	2239.0	2346.0	2353.1	2186.8	2136.8	2158.2	2170.1	2148.7	2146.3
47.5°	10301.5	4549.4	2179.6	2196.3	2258.1	2075.0	2013.2	2015.6	2037.0	2039.4	2029.9
50°	9721.6	4119.2	2108.3	2067.9	2027.5	1958.6	1901.5	1889.6	1911.0	1932.4	1939.6
52.5°	*8972.8*	*3708.0*	*1989.5*	*1927.7*	*1832.6*	*1832.6*	*1806.5*	*1768.4*	*1796.9*	*1825.5*	*1835.0*
55°	8423.8	3403.7	1820.7	1751.8	1647.2	1682.9	1678.1	1644.8	1682.9	1704.2	1711.4
57.5°	7299.5	2735.8	1602.0	1580.6	1492.7	1535.5	1545.0	1502.2	1483.2	1487.9	1495.1
60°	4333.1	1766.0	1445.2	1442.8	1364.3	1414.3	1442.8	1400.0	1343.0	1350.1	1359.6
62.5°	1944.3	1350.1	1247.9	1238.4	1236.0	1300.2	1331.1	1290.7	1209.8	1217.0	1226.5
65°	1224.1	1167.1	1083.9	1083.9	1121.9	1176.6	1200.3	1167.1	1074.4	1062.5	1072.0
67.5°	1136.2	1086.2	1000.7	984.0	1003.1	1048.2	1050.6	986.4	931.7	922.2	922.2
70°	1019.7	981.7	898.5	865.2	858.1	855.7	848.6	831.9	796.3	786.8	791.5
72.5°	843.8	817.7	765.4	729.7	710.7	708.3	679.8	665.5	634.6	629.9	627.5
75°	558.6	565.7	565.7	561.0	544.3	537.2	506.3	492.0	456.4	442.1	439.7
77.5°	330.4	337.5	347.0	349.4	347.0	347.0	318.5	301.9	266.2	247.2	242.4
80°	202.0	206.8	211.5	218.7	209.2	202.0	175.9	159.3	142.6	130.7	128.4
82.5°	130.7	135.5	137.9	142.6	137.9	128.4	107.0	97.5	85.6	76.1	73.7
85°	73.7	76.1	80.8	80.8	73.7	66.6	54.7	47.5	40.4	35.7	35.7
87.5°	26.1	26.1	26.1	28.5	23.8	21.4	14.3	9.5	7.1	7.1	7.1
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

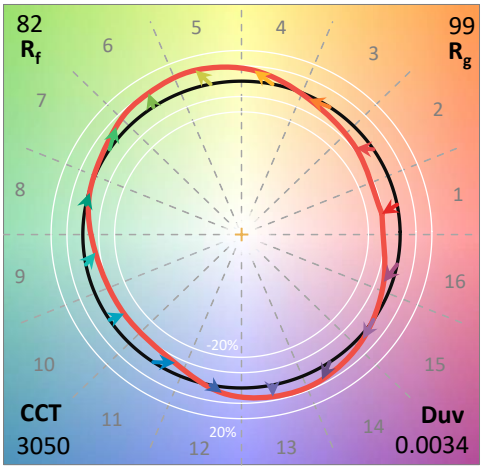
Test Information

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

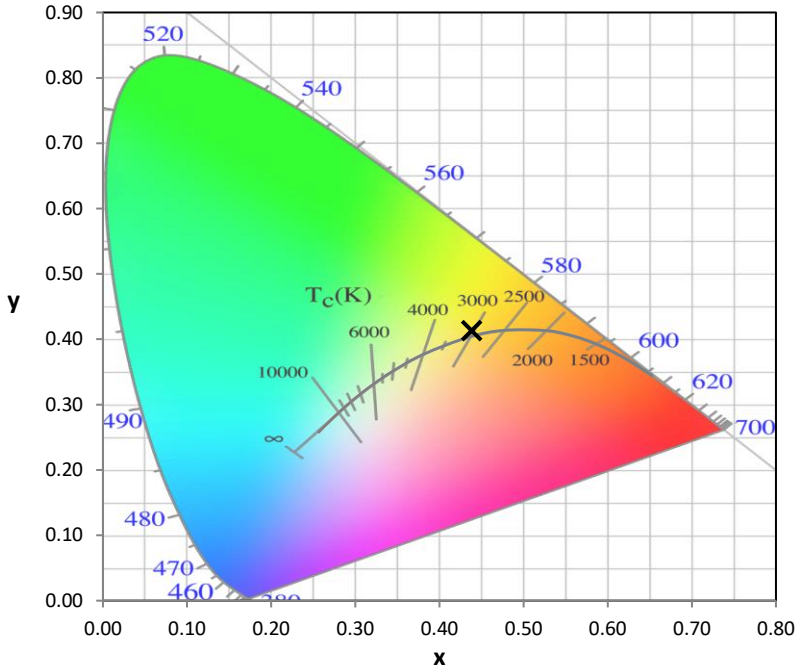
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

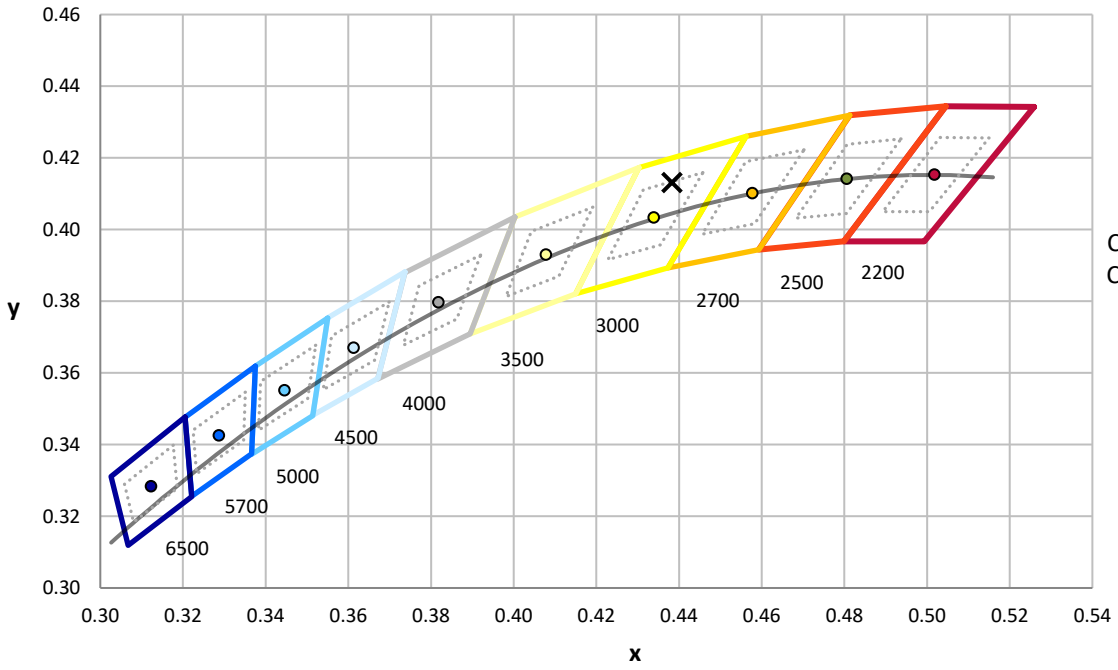
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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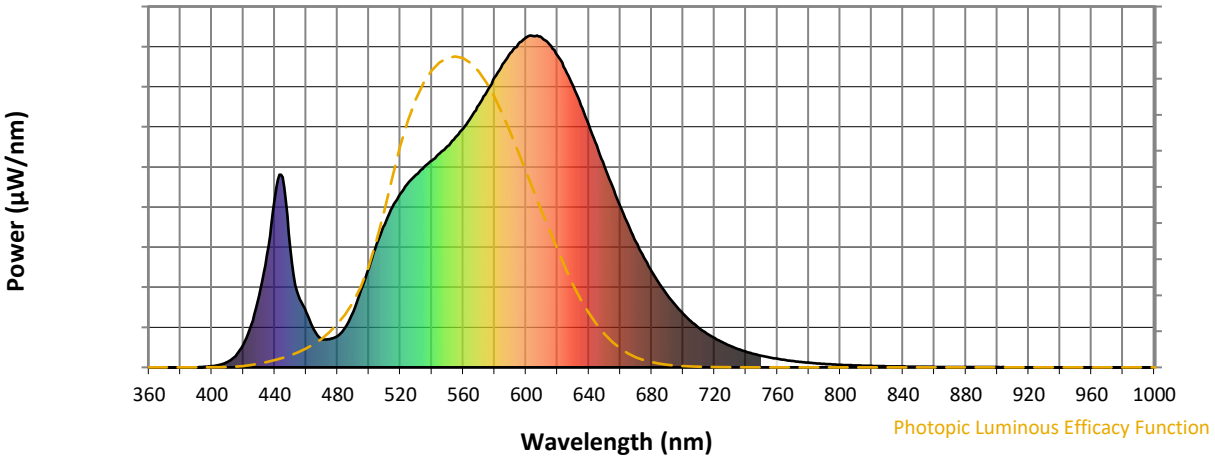
Photopic Flux vs. Wavelength



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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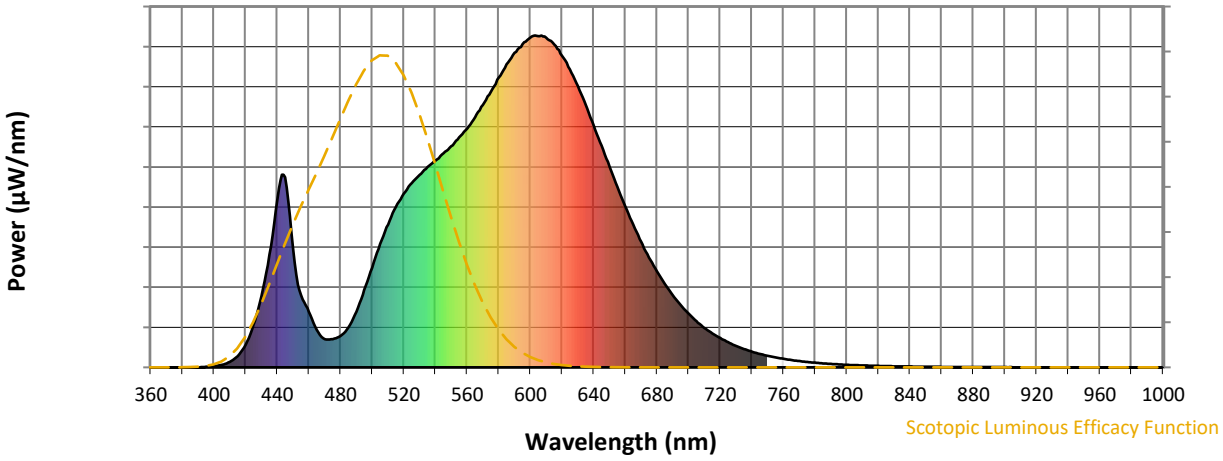
Scotopic Flux vs. Wavelength



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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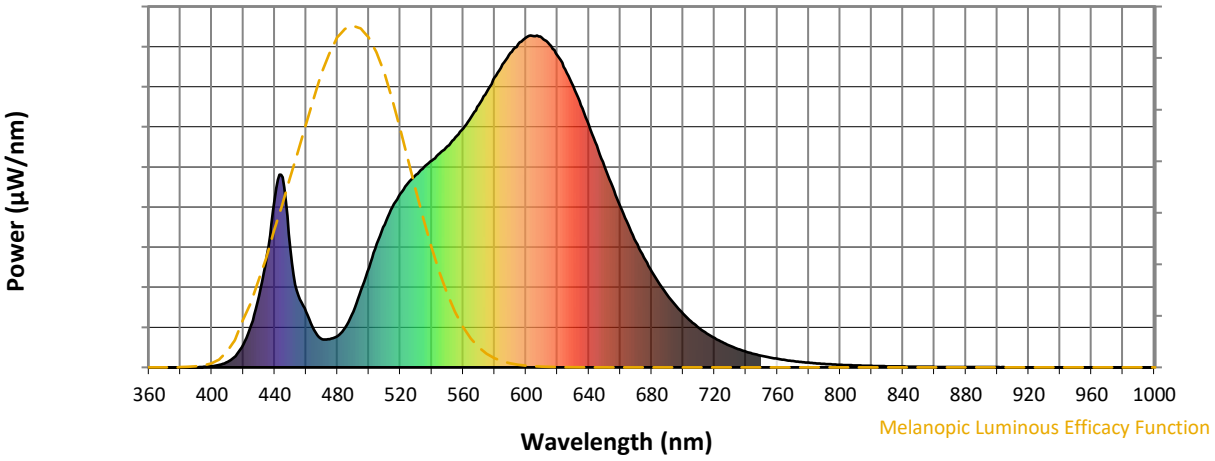
Melanopic Flux vs. Wavelength



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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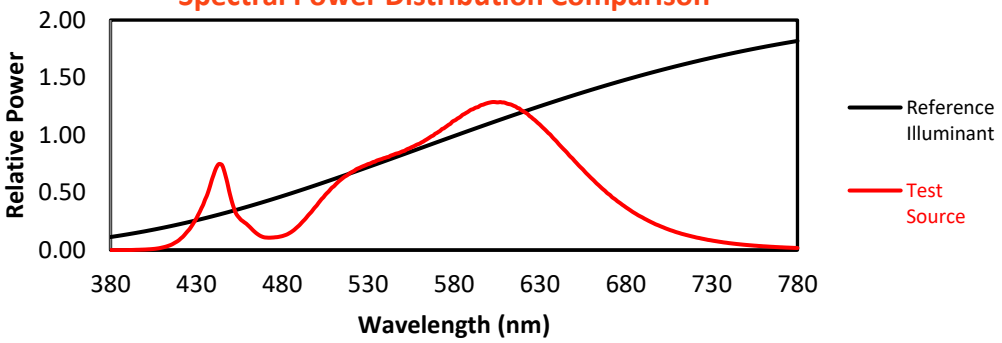
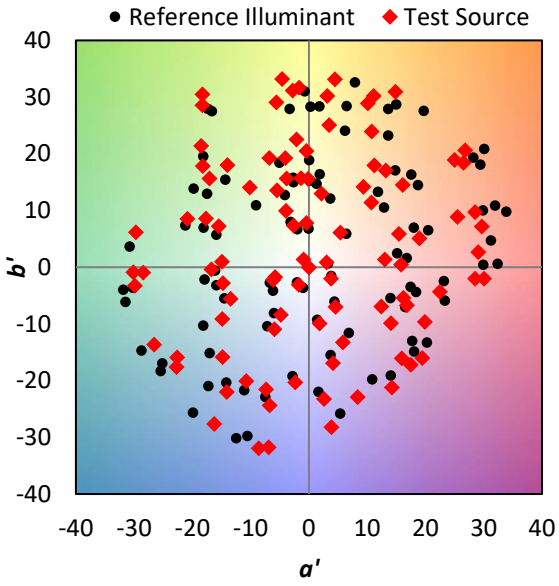
Summary

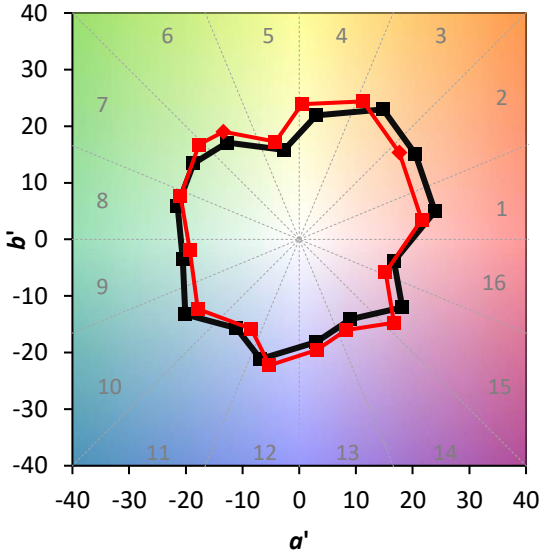
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

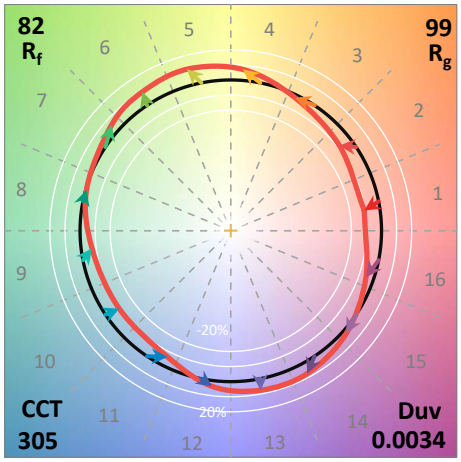
Spectral Power Distribution Comparison

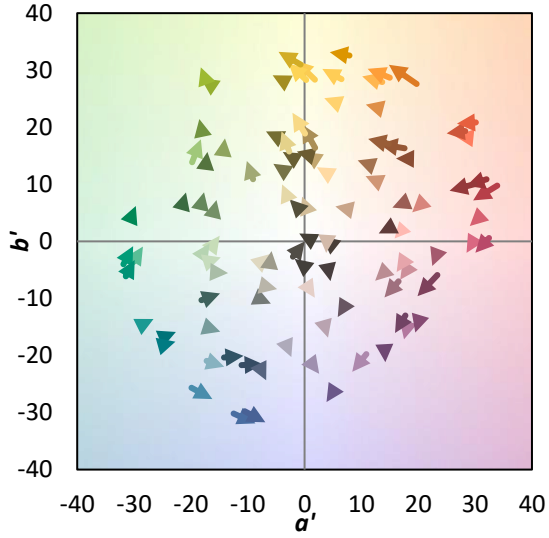


Color Vector Graphics









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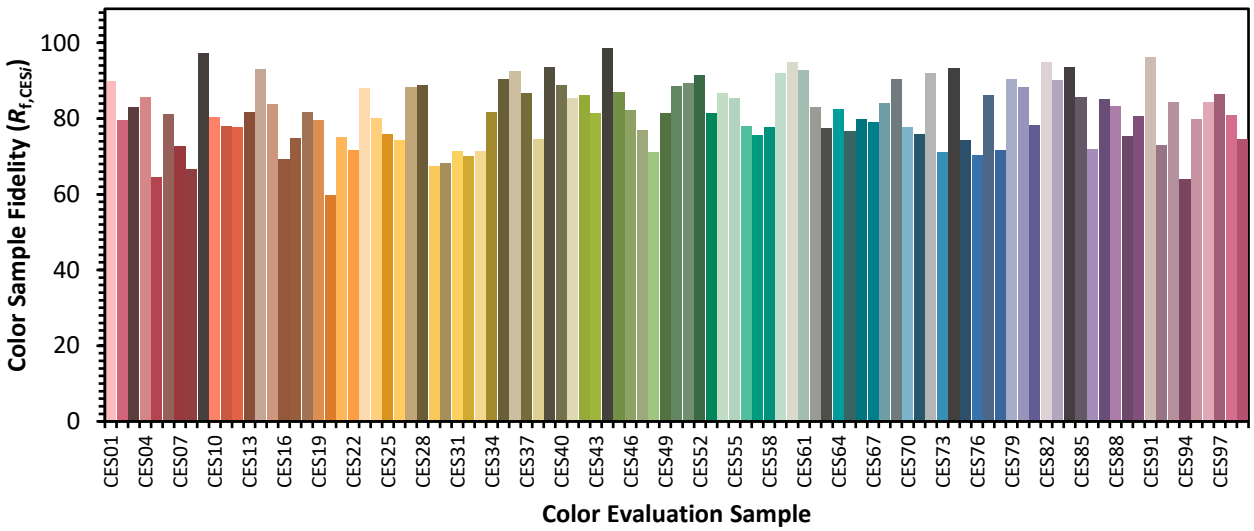
Individual Sample Fidelity Index ($R_{f,i}$)

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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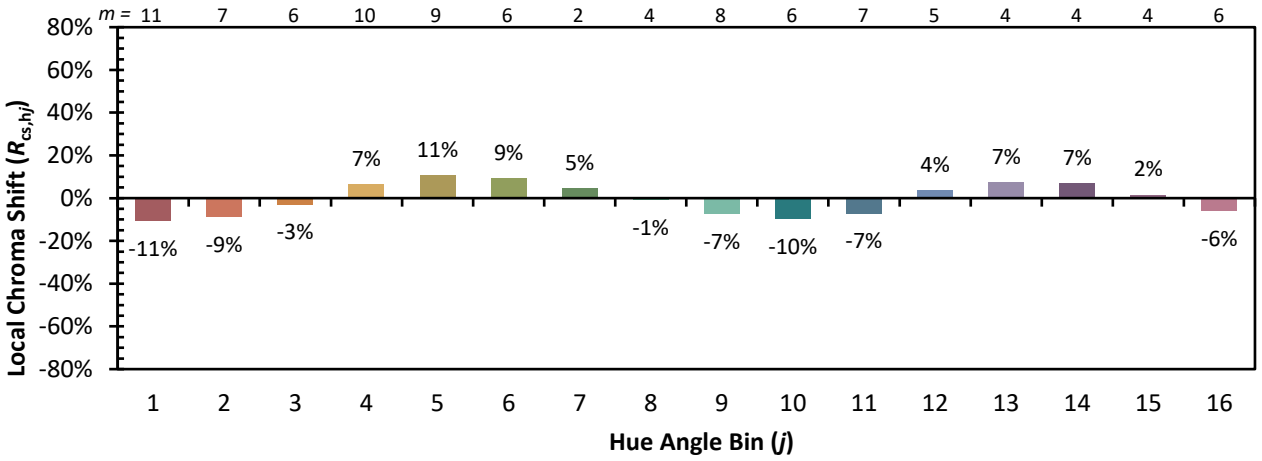
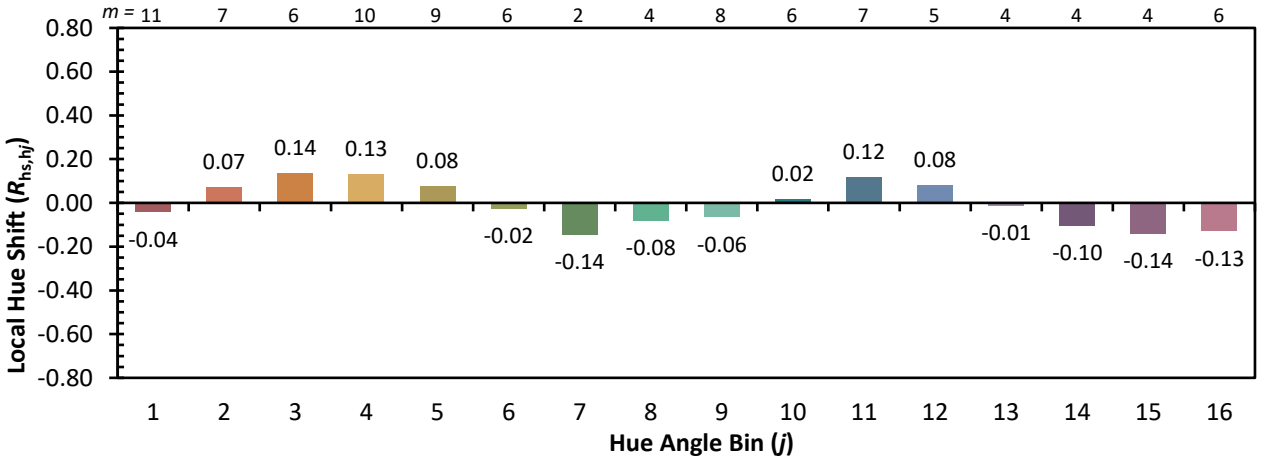
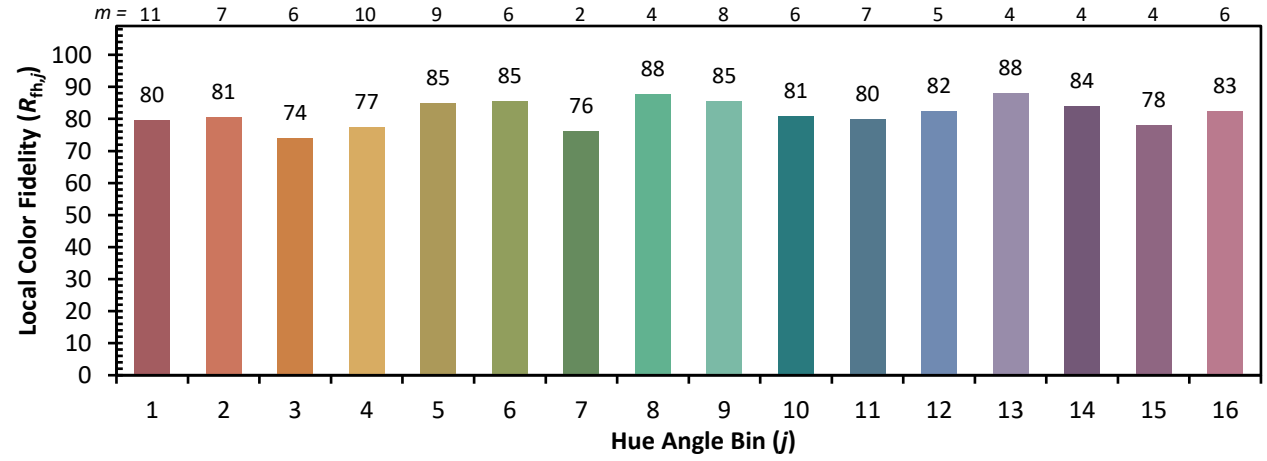
Color Rendition by Hue-Angle Bin







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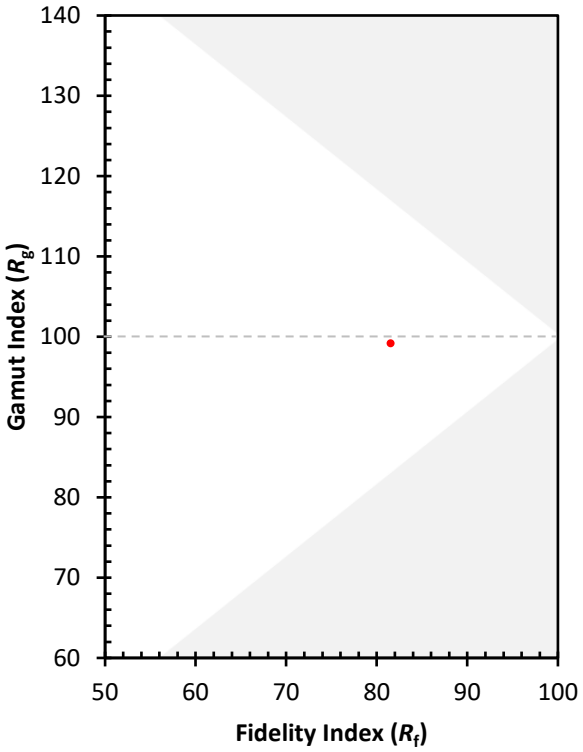
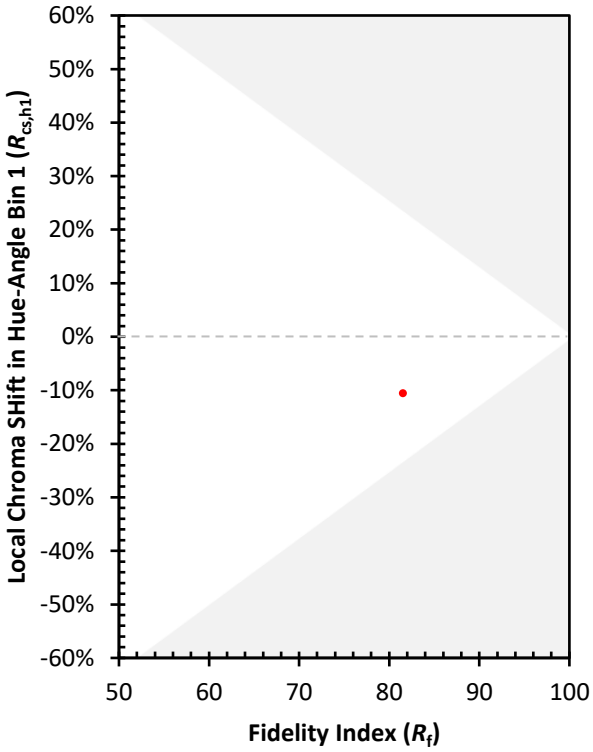
Measure Comparisons





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