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: P640965

Luminaire Tested: GWS-SA5E-830-U-T2-W-HSS

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:	P640965
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-22)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5E-830-U-T2-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	22338.3 lumens
Efficiency:	N/A
Efficacy:	82.9 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G4

Input Watts (W):	269.6
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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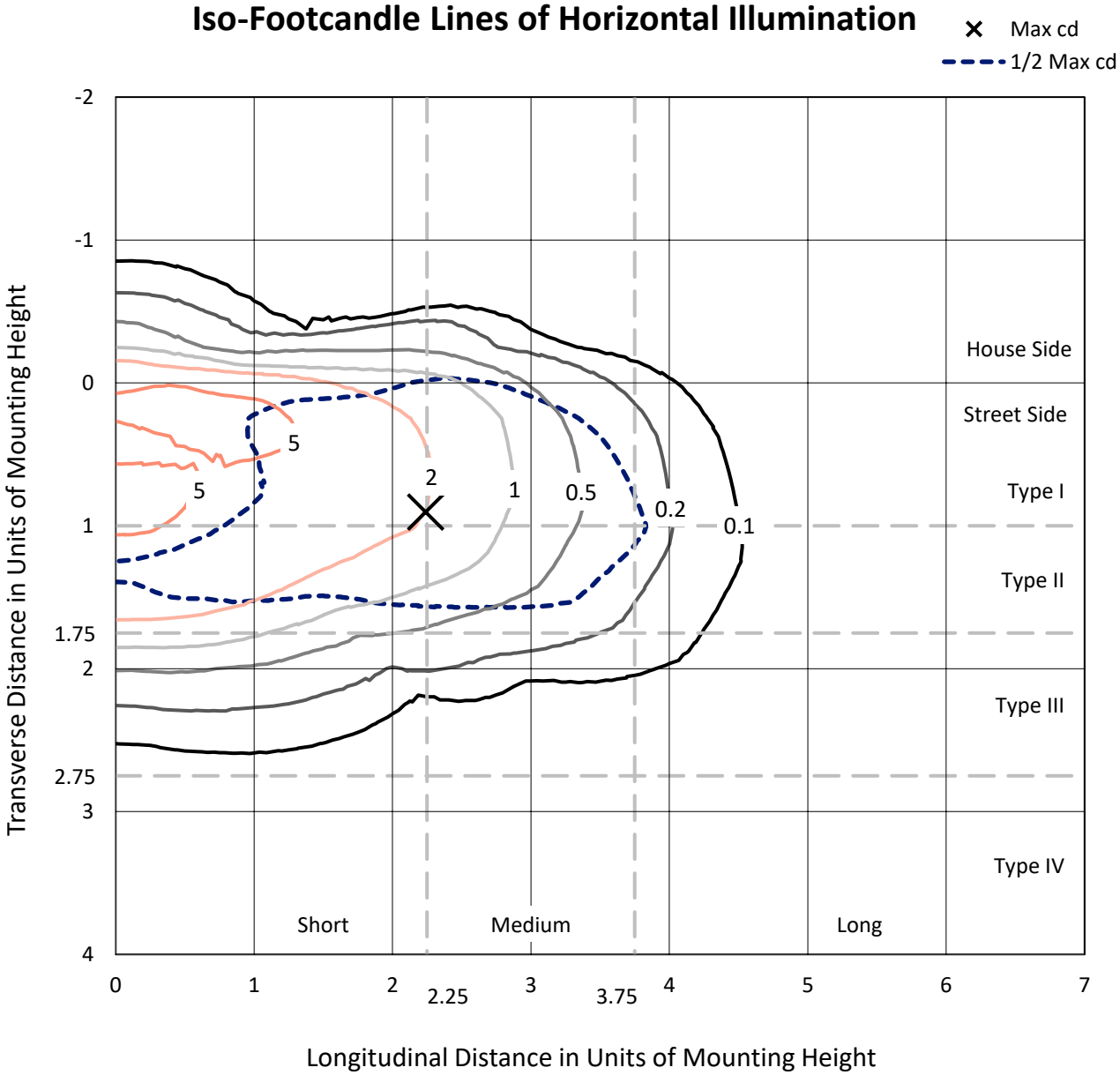
Scaled Data Report

REPORT NUMBER: P640965
CATALOG NUMBER: GWS-SA5E-830-U-T2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type II - Short - N/A

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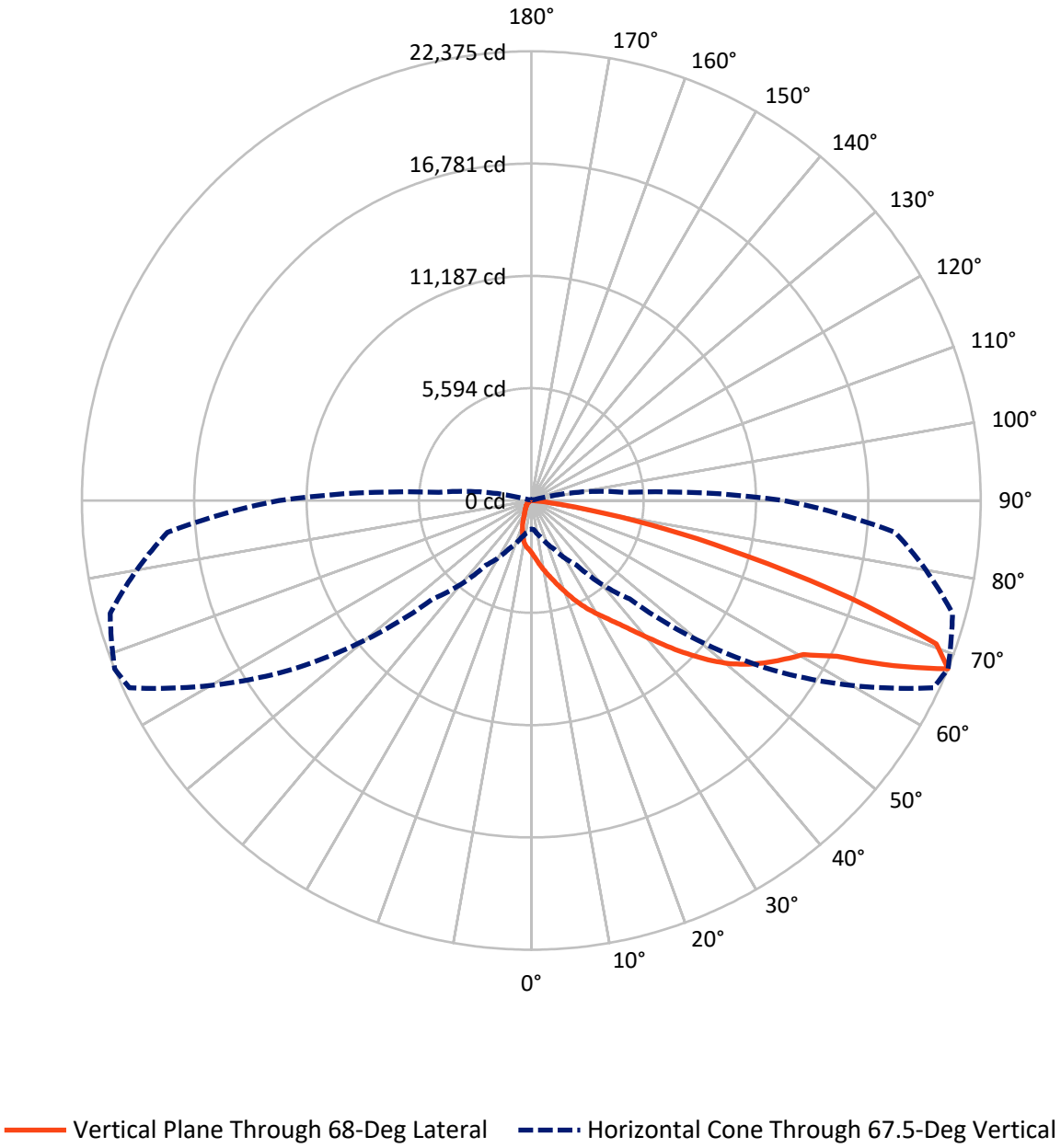
Luminous Intensity Polar Plot



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REPORT NUMBER: P640965
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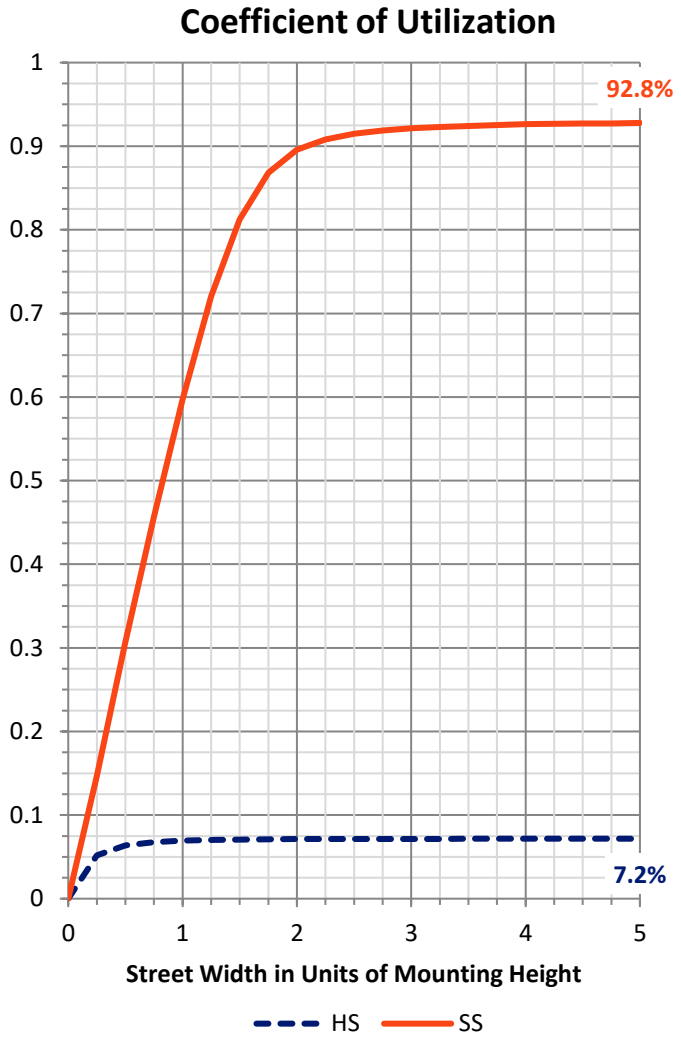
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1613.1	0.0	1613.1
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	20725.2	0.0	20725.2
	% Fixture	92.8	0.0	92.8
Total	Lumens	22338.3	0.0	22338.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.5	1.1
10°-20°	728.1	3.3
20°-30°	1251.2	5.6
30°-40°	2175.4	9.7
40°-50°	3795.9	17.0
50°-60°	5725.2	25.6
60°-70°	5740.8	25.7
70°-80°	2532.9	11.3
80°-90°	135.3	0.6
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°	22338.3	100.0
0°-180°	22338.3	100.0



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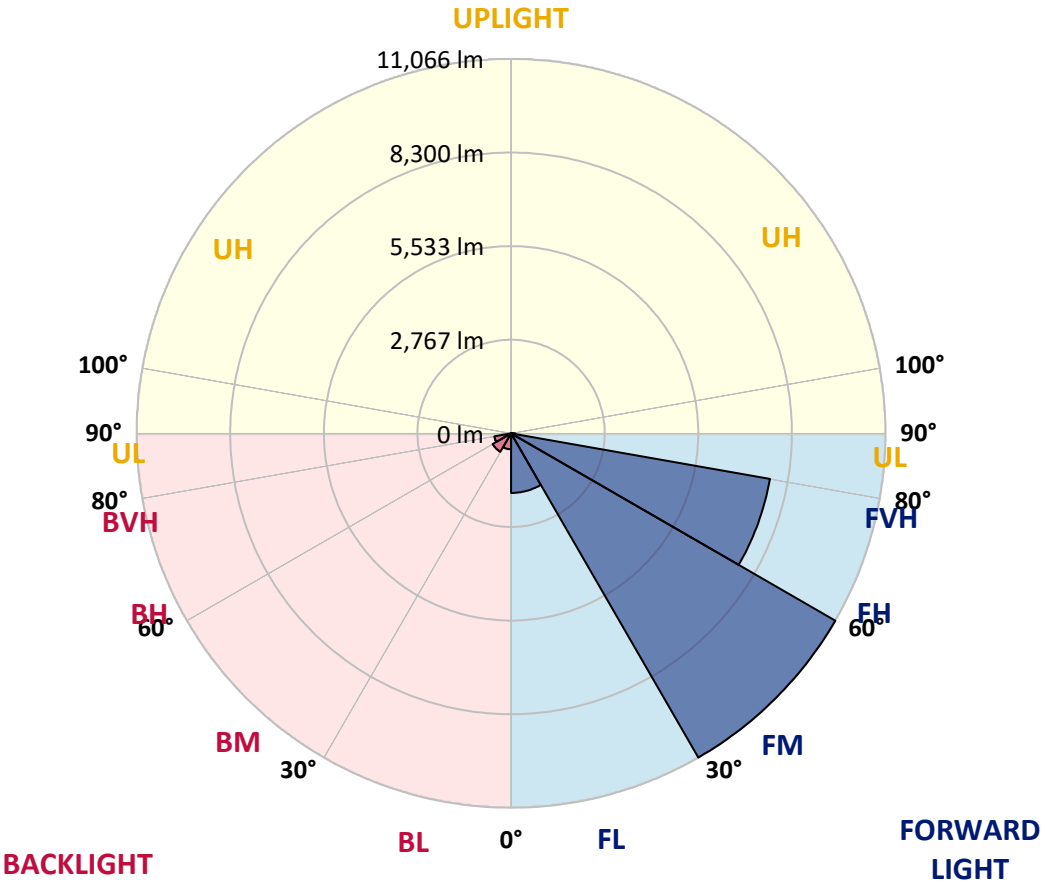
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1760.9	7.9			
FM	(30°-60°)	11066.3	49.5			
FH	(60°-80°)	7770.3	34.8			G4/12000
FVH	(80°-90°)	127.7	0.6			G2/225
BL	(0°-30°)	471.9	2.1	B1/500		
BM	(30°-60°)	630.1	2.8	B1/1000		
BH	(60°-80°)	503.4	2.3	B2/1000		G2/1000
BVH	(80°-90°)	7.7	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-G4
Type II Short



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Scaled Data Report

REPORT NUMBER: P640965
CATALOG NUMBER: GWS-SA5E-830-U-T2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6
2.5°	3027.2	3046.4	3027.2	3031.5	2975.9	2950.2	2894.6	2817.7	2798.4	2749.3	2674.4
5°	3397.0	3414.1	3394.9	3390.6	3326.5	3279.4	3187.5	3055.0	3016.5	2920.3	2772.8
7.5°	3598.0	3608.7	3615.1	3625.8	3602.3	3563.8	3480.4	3315.8	3275.2	3119.1	2911.7
10°	3619.4	3627.9	3660.0	3724.1	3771.1	3794.7	3747.6	3595.8	3531.7	3379.9	3082.8
12.5°	3559.5	3572.3	3623.6	3730.5	3860.9	3980.7	4010.6	3878.0	3820.3	3625.8	3283.7
15°	3480.4	3491.1	3561.6	3707.0	3903.7	4123.9	4247.9	4190.2	4126.0	3922.9	3506.1
17.5°	3358.5	3373.5	3471.8	3668.5	3922.9	4237.2	4504.4	4523.7	4478.8	4258.6	3751.9
20°	3290.1	3300.8	3388.5	3591.6	3910.1	4320.6	4743.9	4925.6	4876.4	4645.5	4034.1
22.5°	3347.9	3356.4	3414.1	3572.3	3867.3	4367.6	4966.2	5327.5	5299.7	5060.3	4331.3
25°	3651.4	3679.2	3645.0	3672.8	3886.6	4393.3	5145.8	5729.4	5735.8	5494.2	4639.1
27.5°	4267.1	4230.8	4149.5	4010.6	4036.2	4461.7	5299.7	6107.8	6163.4	5917.5	4912.8
30°	4893.5	4872.1	4823.0	4607.0	4427.5	4613.5	5430.1	6494.7	6582.4	6334.4	5156.5
32.5°	5596.9	5618.2	5530.6	5271.9	4966.2	4921.3	5564.8	6862.5	7027.1	6806.9	5442.9
35°	6437.0	6443.4	6270.3	5983.8	5637.5	5430.1	5806.4	7268.6	7572.2	7409.7	5825.6
37.5°	7255.8	7294.3	7200.2	6749.2	6441.3	6062.9	6206.1	7790.3	8217.8	8153.7	6306.6
40°	7980.5	8040.4	8010.5	7574.4	7170.3	6851.8	6826.1	8401.7	8998.2	9070.8	6941.6
42.5°	8557.8	8596.2	8619.8	8309.8	7952.8	7773.2	7591.5	9111.5	9919.6	10216.7	7719.7
45°	9167.0	9179.9	9229.0	9019.5	8707.4	8722.4	8495.8	9973.0	10890.1	11486.6	8613.3
47.5°	9943.1	9985.8	9962.3	9742.1	9459.9	9628.8	9430.0	10860.2	11847.9	12842.0	9528.3
50°	10888.0	10932.9	10911.5	10655.0	10340.7	10411.3	10287.3	11721.8	12771.4	14120.4	10289.4
52.5°	11375.4	11411.8	11676.9	11792.3	11627.7	11178.8	11018.4	12668.8	13551.8	15172.2	10988.5
55°	11140.3	11165.9	11743.1	12230.6	12833.4	12384.5	11753.8	13400.0	14240.1	15993.2	11508.0
57.5°	10165.4	10304.4	11089.0	11914.2	13181.9	13575.3	12946.7	14195.2	14902.9	16564.0	12018.9
60°	8166.5	8160.1	9284.6	10766.1	12502.1	13902.4	14631.4	15270.6	15567.7	17002.2	12703.0
62.5°	4513.0	4553.6	6050.1	8001.9	10612.2	13055.8	15894.8	17128.4	17083.5	17767.6	13774.1
65°	2246.9	2328.1	3140.5	4583.5	7061.3	10789.7	16112.9	19963.1	19834.9	19569.8	15986.7
67.5°	1425.9	1458.0	1907.0	2663.7	3925.1	6935.1	14755.4	22077.4	22374.6	21707.6	18182.3
70°	923.5	977.0	1325.5	1821.4	2368.7	3574.5	10808.9	20707.1	21389.1	21472.4	16814.1
72.5°	502.4	540.9	846.6	1299.8	1710.3	1787.2	6071.5	15539.9	16636.6	18214.4	13154.1
75°	286.5	314.3	463.9	882.9	1254.9	1088.2	2691.5	10402.7	11101.8	13017.3	9425.7
77.5°	173.2	196.7	260.8	429.7	786.7	726.9	1017.6	6332.3	6776.9	7766.8	4947.0
80°	79.1	94.1	164.6	237.3	429.7	344.2	389.1	2952.4	3048.6	3187.5	1637.6
82.5°	36.3	42.8	74.8	141.1	243.7	198.8	149.6	682.0	959.9	908.6	416.9
85°	4.3	4.3	27.8	57.7	68.4	51.3	62.0	153.9	194.5	273.6	119.7
87.5°	0.0	0.0	2.1	2.1	4.3	6.4	12.8	19.2	27.8	44.9	29.9
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: P640965
CATALOG NUMBER: GWS-SA5E-830-U-T2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6	2599.6
2.5°	2640.2	2580.4	2526.9	2447.8	2394.4	2334.5	2293.9	2244.7	2225.5	2210.5	2189.1
5°	2700.1	2603.9	2473.5	2328.1	2208.4	2095.1	1990.3	1921.9	1862.1	1853.5	1823.6
7.5°	2798.4	2655.2	2435.0	2197.7	1994.6	1806.5	1659.0	1539.2	1479.4	1460.1	1425.9
10°	2928.8	2732.2	2377.3	2013.8	1721.0	1496.5	1329.7	1195.1	1101.0	1066.8	1041.1
12.5°	3074.2	2802.7	2285.3	1787.2	1453.7	1197.2	985.5	842.3	782.4	761.1	741.8
15°	3241.0	2869.0	2140.0	1560.6	1192.9	880.8	731.1	669.1	643.5	637.1	630.7
17.5°	3401.3	2911.7	1966.8	1325.5	917.1	684.1	613.6	590.0	583.6	577.2	572.9
20°	3583.0	2941.7	1763.7	1103.1	711.9	579.4	545.1	528.0	515.2	502.4	500.3
22.5°	3769.0	2941.7	1543.5	885.1	596.5	519.5	481.0	448.9	425.4	412.6	408.3
25°	3946.4	2901.0	1325.5	707.6	525.9	461.8	412.6	376.3	344.2	329.2	325.0
27.5°	4072.6	2796.3	1135.2	598.6	476.7	410.5	350.6	310.0	284.3	269.4	267.2
30°	4151.7	2640.2	959.9	534.5	434.0	357.0	297.2	263.0	243.7	233.0	228.7
32.5°	4211.5	2447.8	803.8	489.6	393.4	310.0	258.7	230.9	213.8	205.2	203.1
35°	4331.3	2266.1	688.4	448.9	350.6	271.5	226.6	205.2	192.4	181.7	179.6
37.5°	4498.0	2114.3	596.5	412.6	310.0	241.6	205.2	186.0	175.3	164.6	162.5
40°	4743.9	2018.1	528.0	376.3	273.6	218.1	188.1	171.0	156.1	145.4	143.2
42.5°	5122.3	1973.2	483.2	339.9	241.6	196.7	173.2	151.8	136.8	126.1	124.0
45°	5573.3	1996.7	444.7	303.6	220.2	181.7	153.9	132.5	117.6	106.9	104.8
47.5°	6056.5	2080.1	412.6	269.4	198.8	166.8	136.8	113.3	100.5	89.8	87.7
50°	6561.0	2216.9	384.8	237.3	181.7	149.6	117.6	98.3	85.5	77.0	74.8
52.5°	6999.3	2402.9	357.0	213.8	166.8	132.5	102.6	85.5	72.7	64.1	62.0
55°	7418.3	2578.2	335.6	192.4	149.6	115.4	89.8	72.7	62.0	53.4	51.3
57.5°	7873.7	2764.2	310.0	173.2	134.7	102.6	79.1	62.0	53.4	44.9	42.8
60°	8536.4	3040.0	271.5	158.2	117.6	89.8	68.4	55.6	47.0	36.3	34.2
62.5°	9492.0	3542.4	228.7	136.8	100.5	77.0	57.7	47.0	38.5	29.9	25.7
65°	11279.2	4397.5	188.1	113.3	81.2	64.1	49.2	38.5	29.9	21.4	19.2
67.5°	*12566.2*	*4619.9*	*151.8*	*91.9*	*66.3*	*49.2*	*40.6*	*29.9*	*21.4*	*15.0*	*12.8*
70°	10986.3	3317.9	117.6	74.8	55.6	38.5	32.1	23.5	15.0	10.7	8.6
72.5°	8277.7	2167.8	87.7	57.7	42.8	32.1	23.5	19.2	12.8	8.6	6.4
75°	5834.2	1252.8	64.1	42.8	29.9	23.5	19.2	15.0	10.7	6.4	6.4
77.5°	2990.8	517.4	44.9	29.9	21.4	15.0	12.8	8.6	8.6	6.4	4.3
80°	908.6	171.0	25.7	19.2	15.0	10.7	6.4	6.4	6.4	4.3	2.1
82.5°	207.4	55.6	15.0	15.0	10.7	8.6	6.4	2.1	2.1	0.0	0.0
85°	53.4	17.1	12.8	10.7	10.7	8.6	4.3	2.1	0.0	0.0	0.0
87.5°	19.2	10.7	10.7	10.7	8.6	6.4	4.3	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

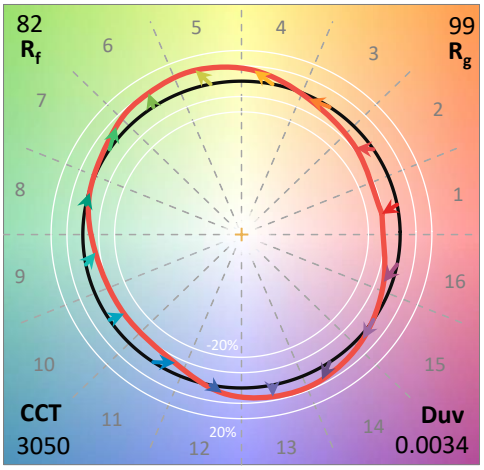
Test Information

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

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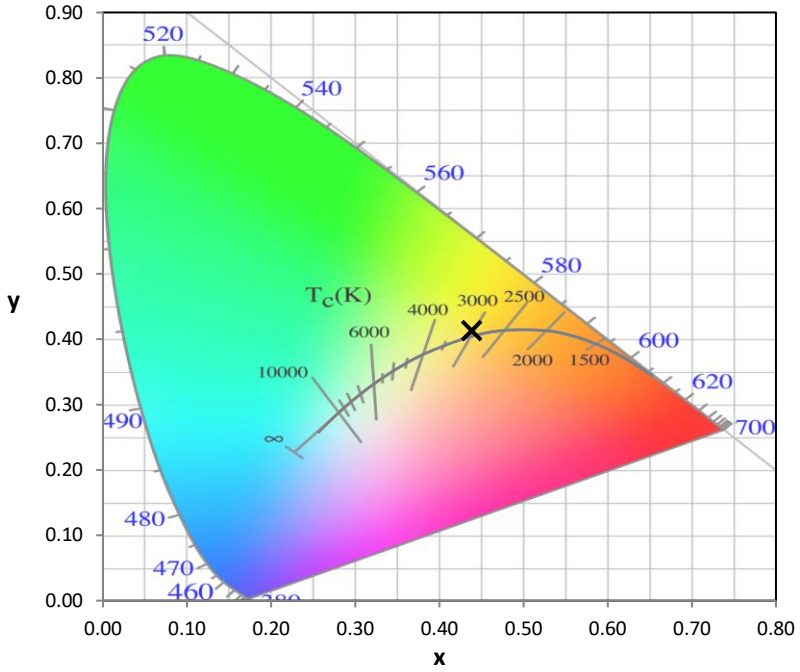
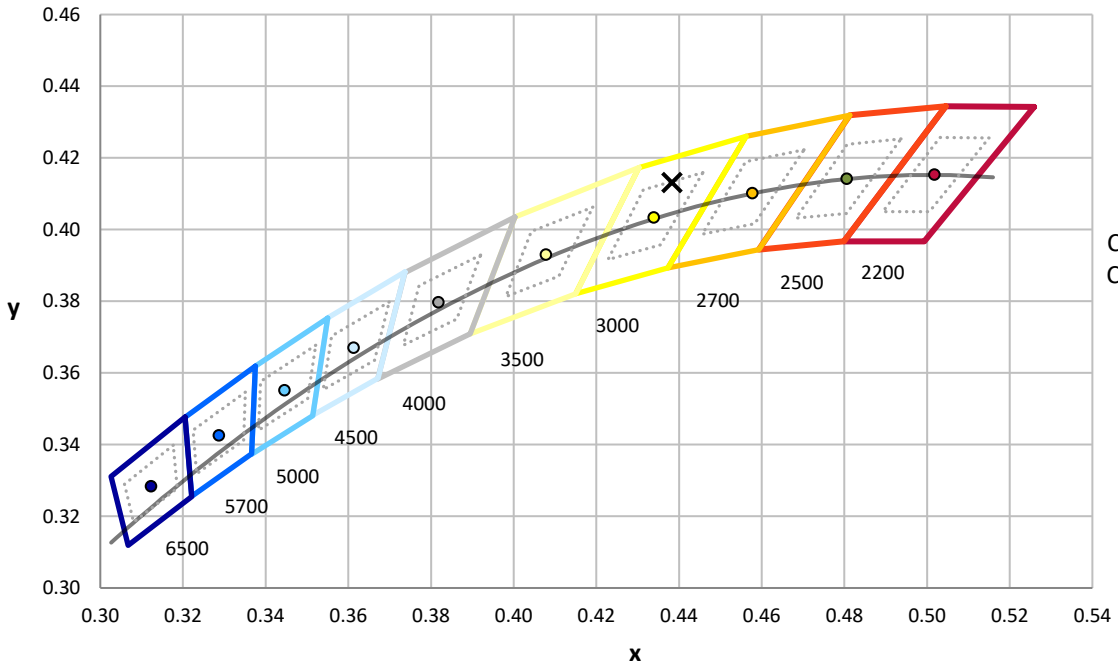
CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

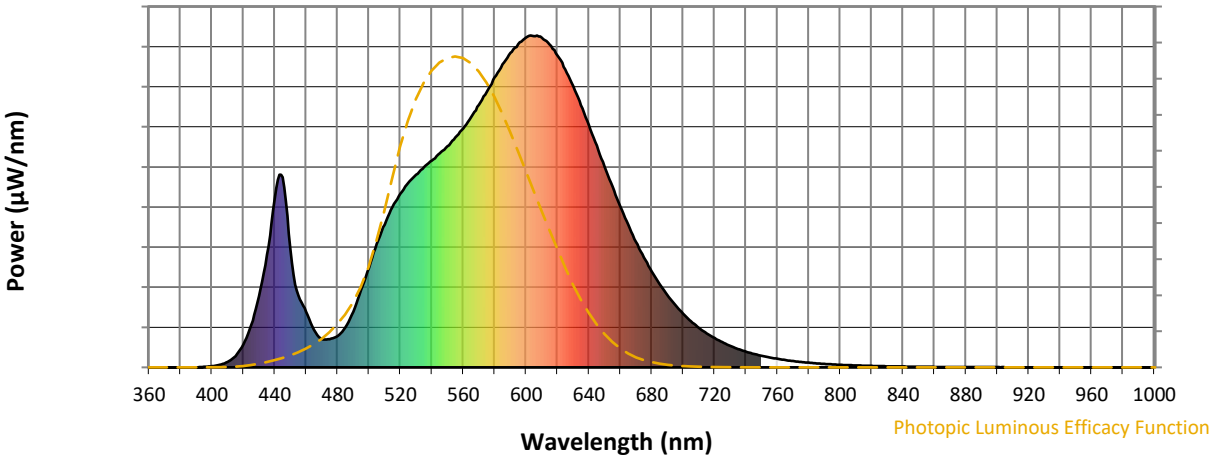


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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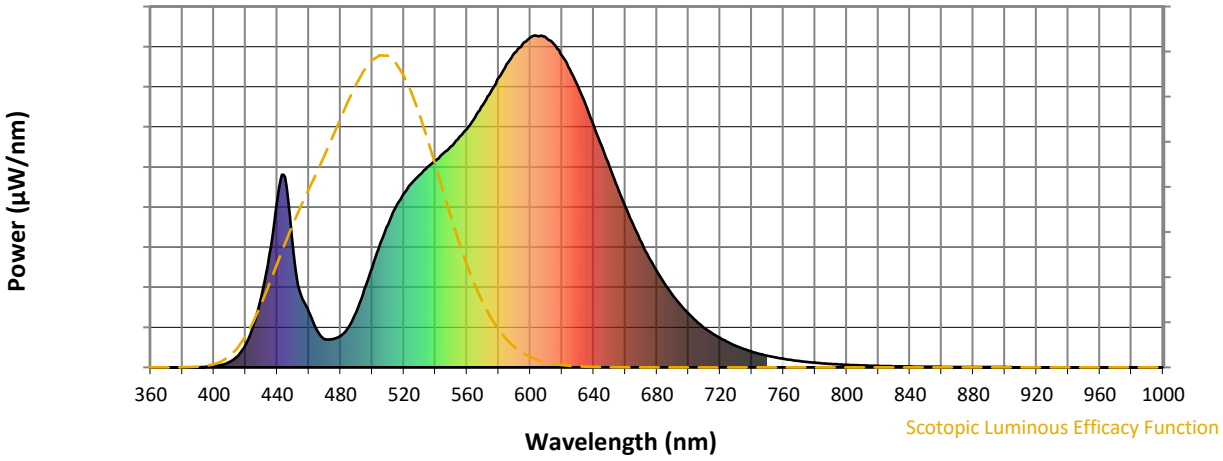
Scotopic Flux vs. Wavelength



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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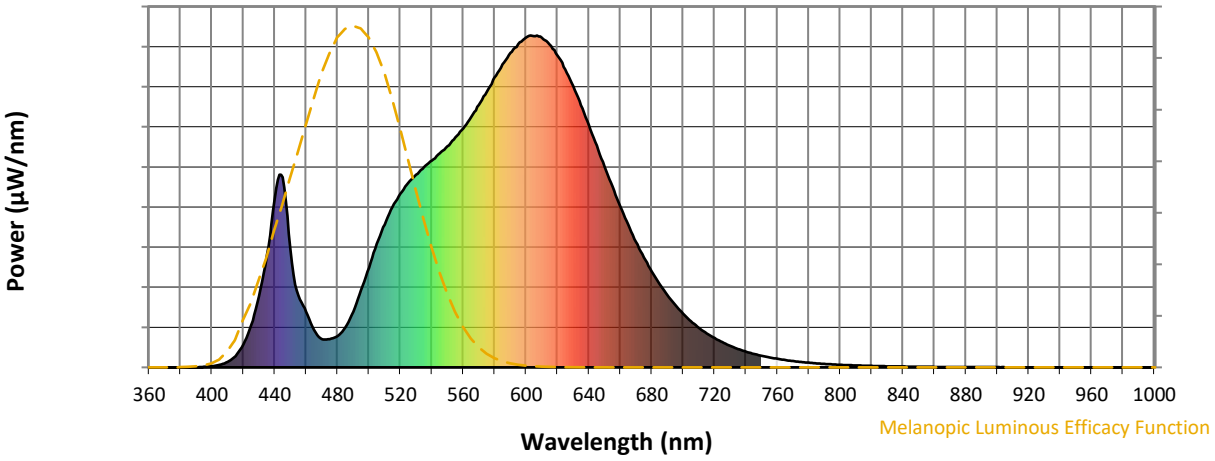
Melanopic Flux vs. Wavelength



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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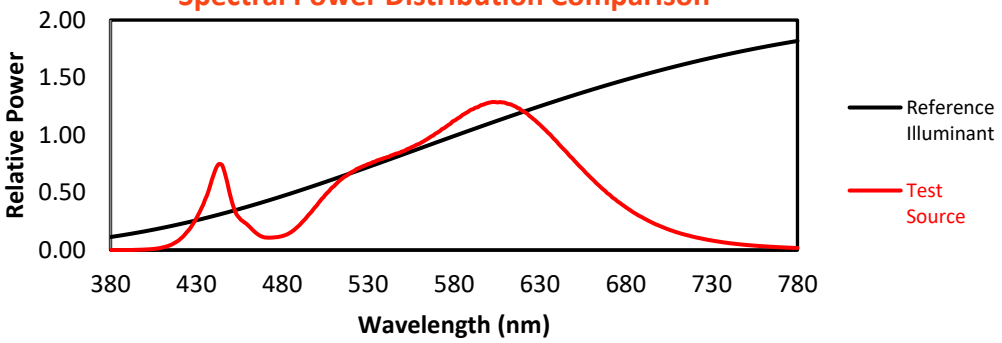
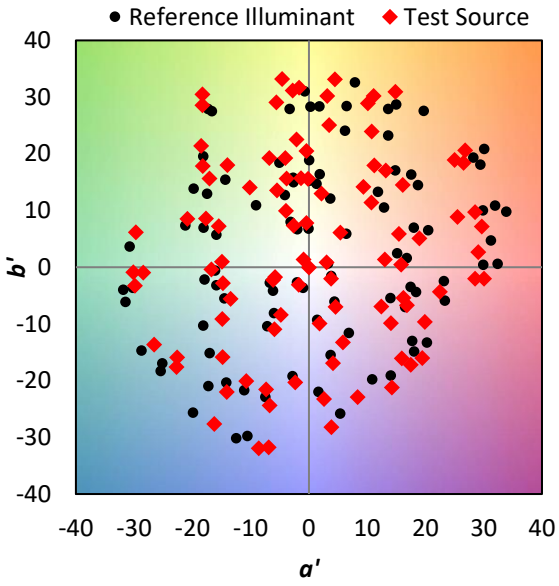
Summary

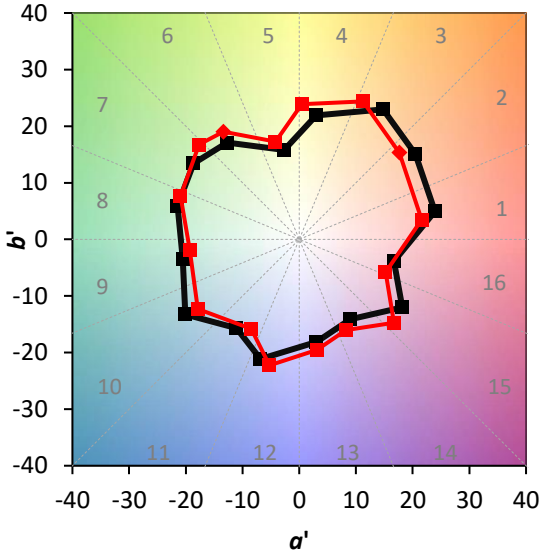
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

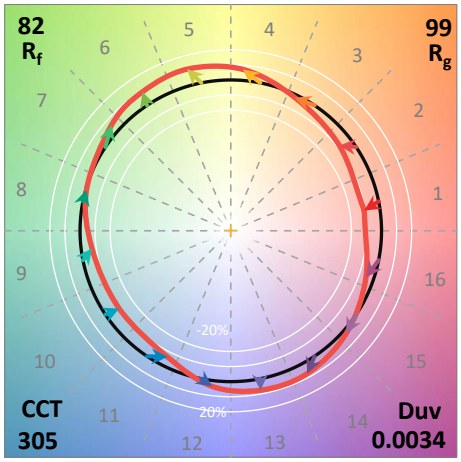
Spectral Power Distribution Comparison

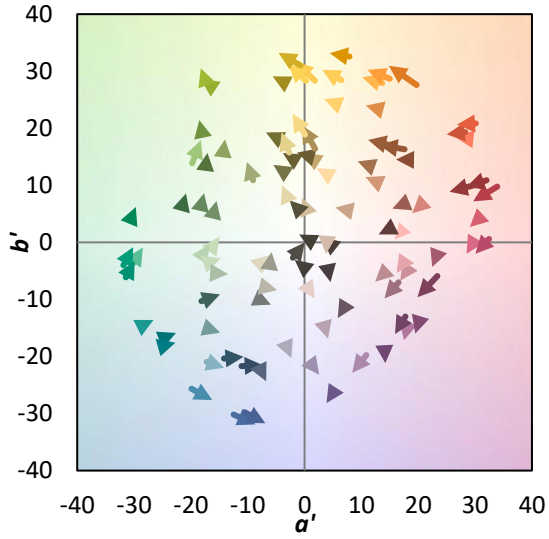


Color Vector Graphics









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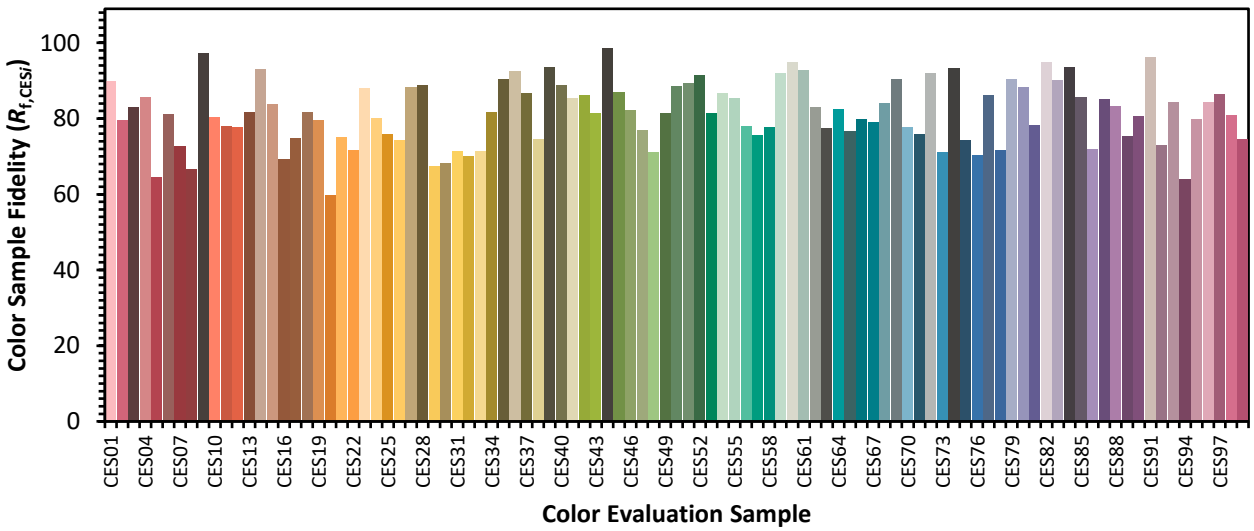
Individual Sample Fidelity Index ($R_{f,i}$)

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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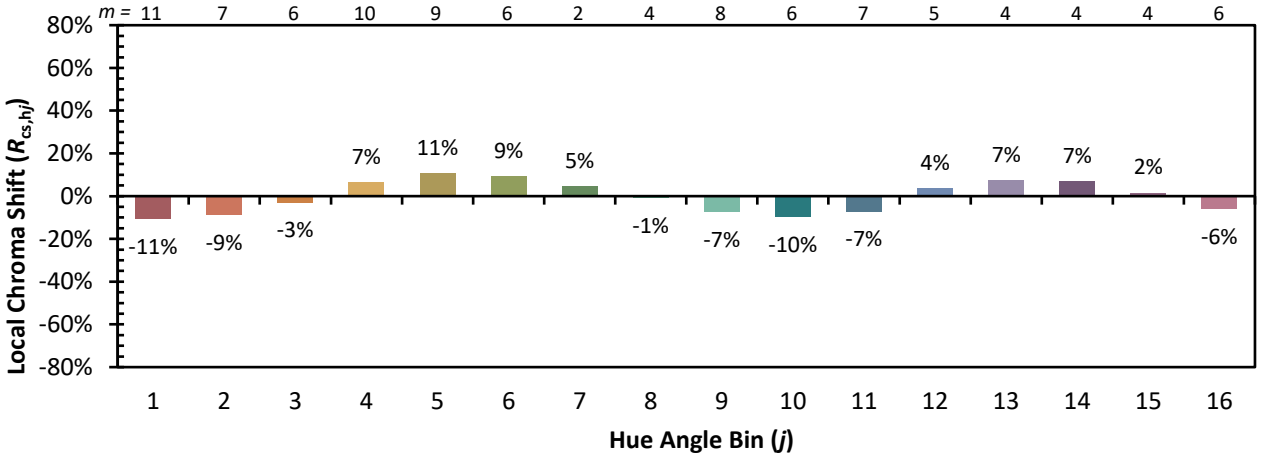
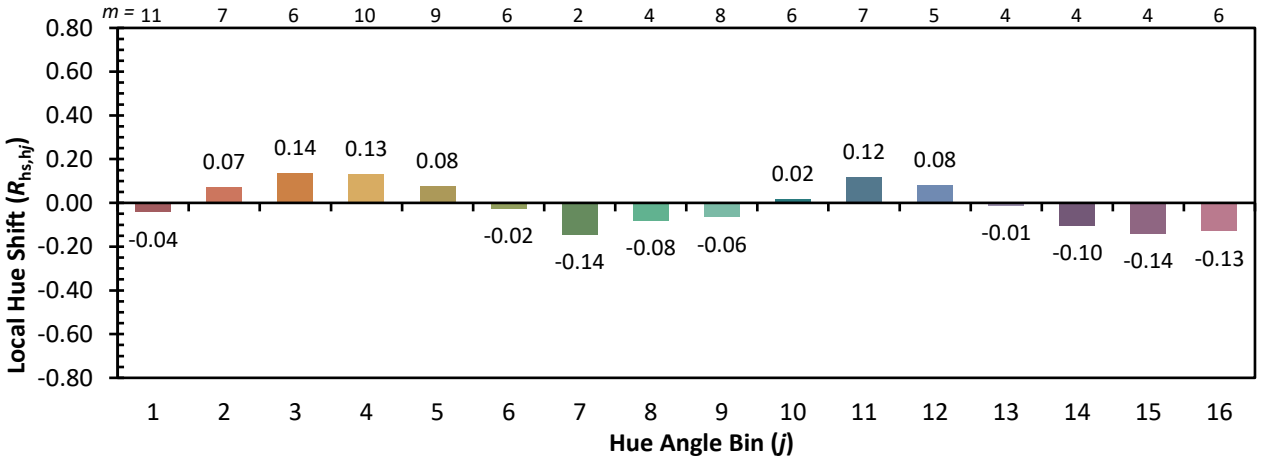
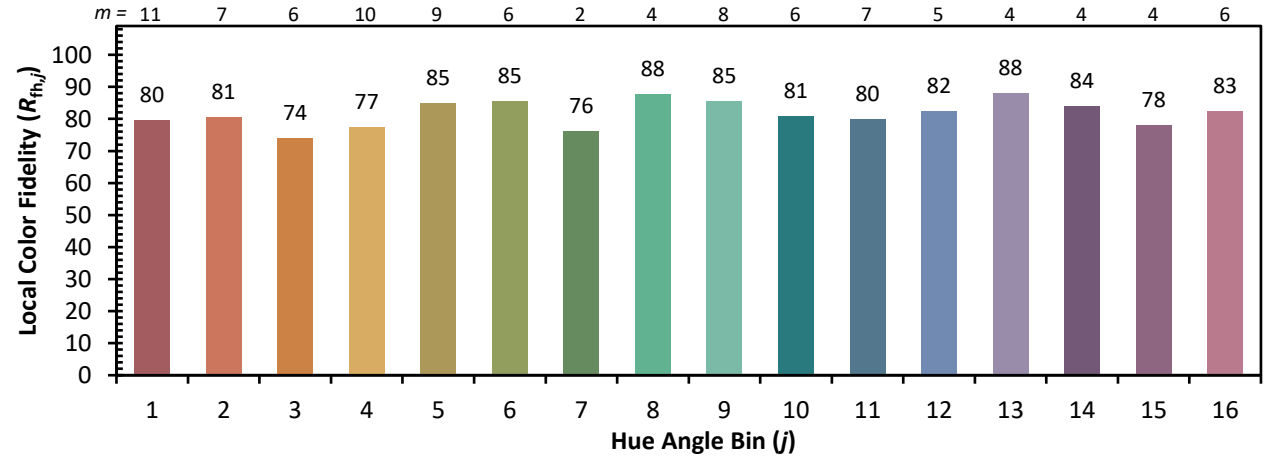
Color Rendition by Hue-Angle Bin







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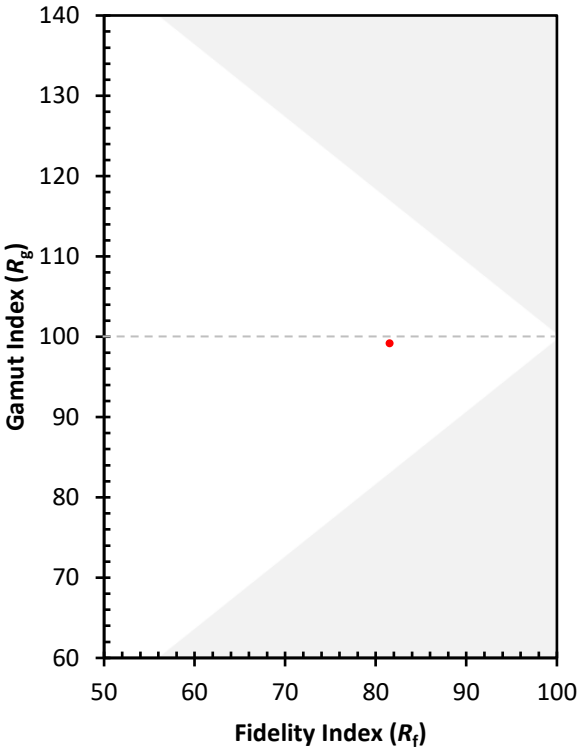
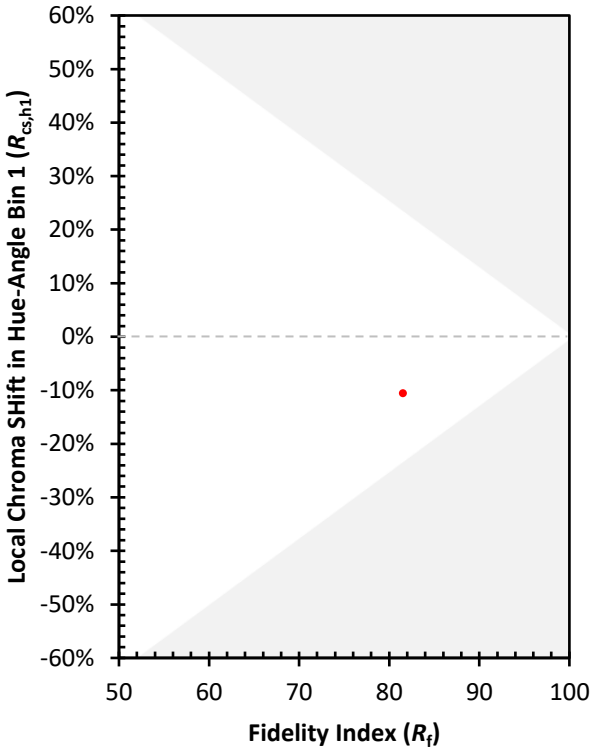
Measure Comparisons





(END OF REPORT)