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: P633542

Luminaire Tested: GWS-SA2E-830-U-T2R-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:	P633542
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-12)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA2E-830-U-T2R-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	7770 lumens
Efficiency:	N/A
Efficacy:	71.8 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G0

Input Watts (W):	108.2
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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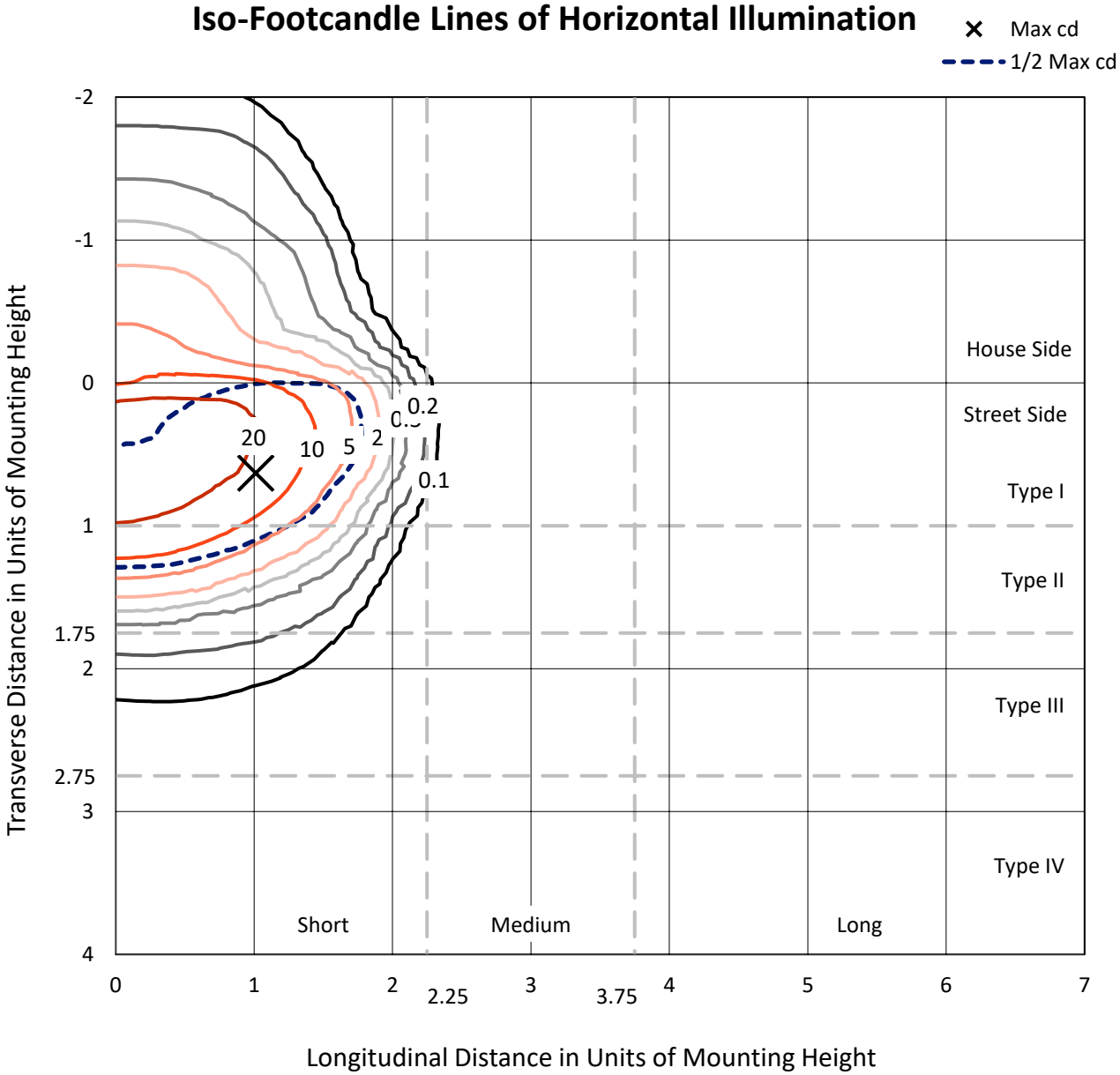
Scaled Data Report

REPORT NUMBER: P633542
CATALOG NUMBER: GWS-SA2E-830-U-T2R-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 28.5 fc
Type II - Short - N/A

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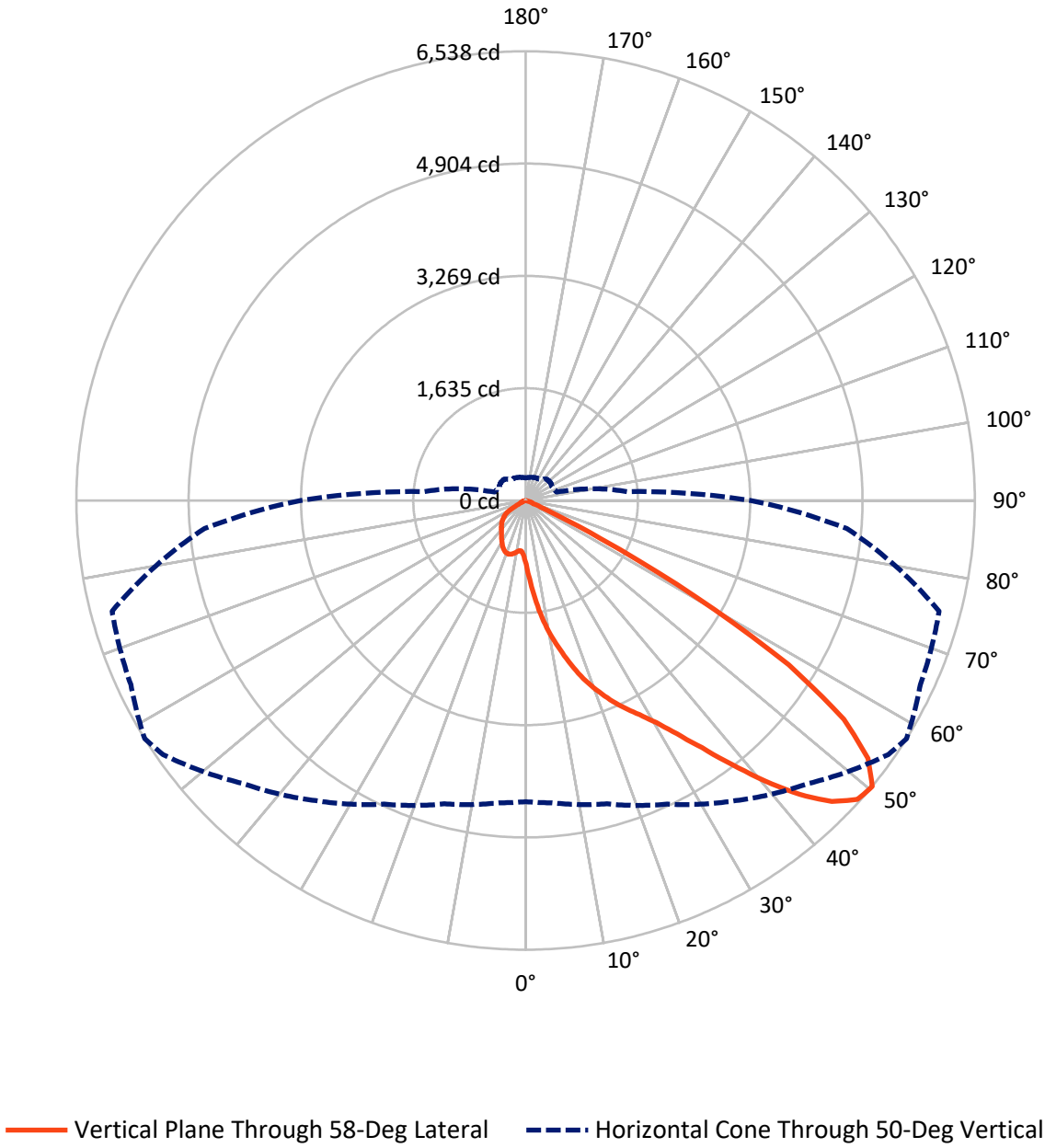
Luminous Intensity Polar Plot



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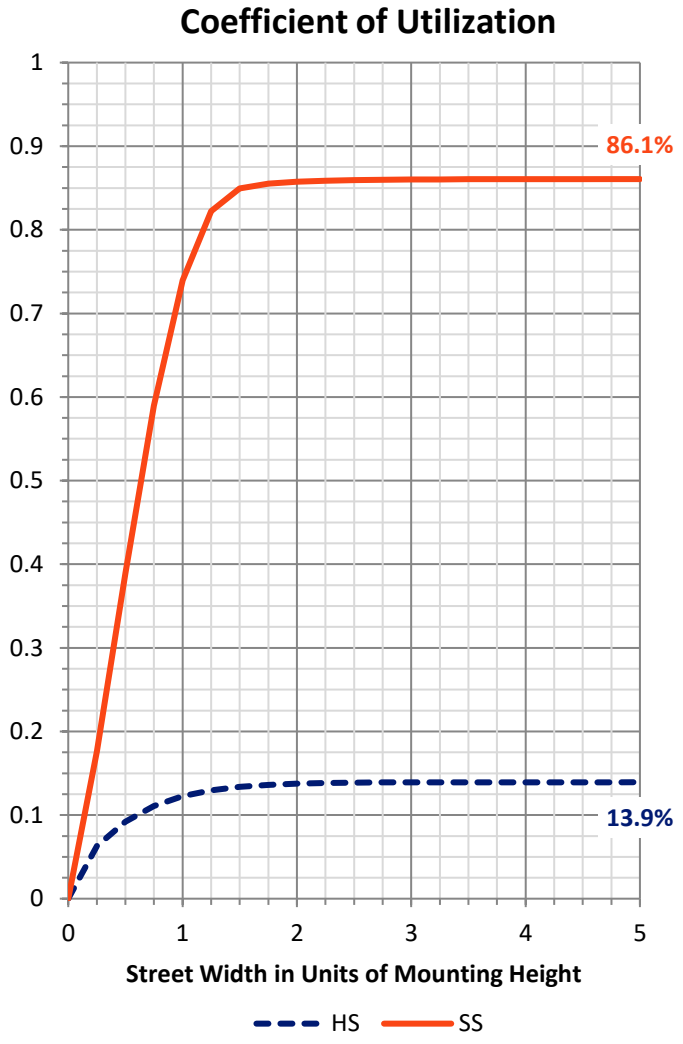
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1088.3	0.0	1088.3
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	6681.7	0.0	6681.7
	% Fixture	86.0	0.0	86.0
Total	Lumens	7770.0	0.0	7770.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.0	1.5
10°-20°	455.2	5.9
20°-30°	921.0	11.9
30°-40°	1629.4	21.0
40°-50°	2375.4	30.6
50°-60°	1903.9	24.5
60°-70°	343.0	4.4
70°-80°	27.0	0.3
80°-90°	0.0	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°	7770.0	100.0
0°-180°	7770.0	100.0



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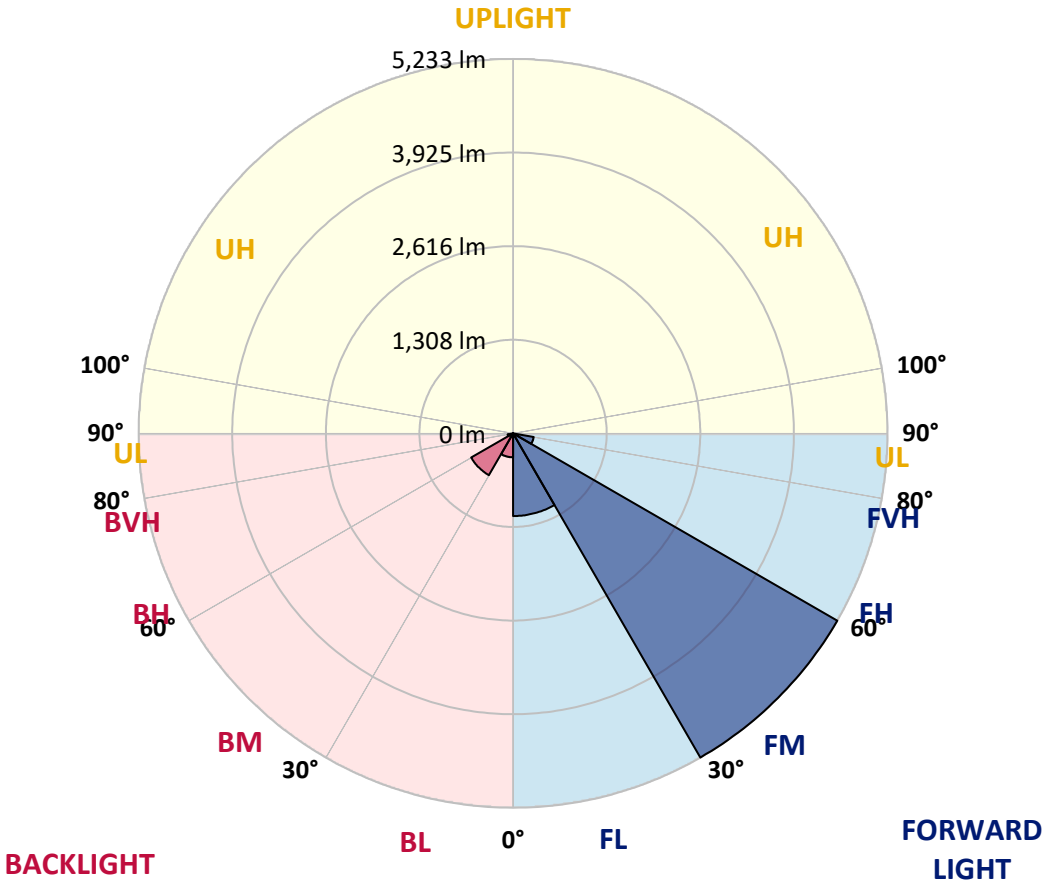
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1156.2	14.9			
FM	(30°-60°)	5232.9	67.3			
FH	(60°-80°)	292.7	3.8			G0/660
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	335.0	4.3	B1/500		
BM	(30°-60°)	675.9	8.7	B1/1000		
BH	(60°-80°)	77.3	1.0	B0/110		G0/110
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: B1-U0-G0
Type II Short



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Scaled Data Report

REPORT NUMBER: P633542
CATALOG NUMBER: GWS-SA2E-830-U-T2R-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	928.1	928.1	928.1	928.1	928.1	928.1	928.1	*928.1*	928.1	928.1	928.1
2.5°	1373.5	1351.9	1339.4	1329.4	1285.4	1215.6	1169.9	*1145.8*	1105.9	1038.6	980.5
5°	1792.2	1776.5	1747.4	1727.4	1670.9	1572.1	1469.9	*1429.1*	1338.6	1186.5	1050.3
7.5°	2069.8	2058.1	2047.3	2020.7	1967.6	1877.8	1764.8	*1722.5*	1582.9	1366.8	1143.3
10°	2283.3	2274.2	2261.7	2260.9	2219.3	2138.7	2028.2	*1984.2*	1833.0	1562.9	1253.0
12.5°	2471.1	2463.6	2461.1	2484.4	2457.8	2398.0	2278.3	*2223.5*	2063.1	1763.2	1374.3
15°	2599.9	2598.2	2609.0	2654.7	2669.7	2642.3	2541.7	*2482.7*	2298.3	1964.2	1508.1
17.5°	2658.9	2663.9	2684.6	2763.6	2830.0	2853.3	2776.0	*2726.2*	2531.7	2167.8	1651.0
20°	2759.4	2757.8	2770.2	2845.0	2926.4	3009.5	2986.2	*2943.9*	2767.7	2383.0	1809.7
22.5°	3042.7	3018.7	2992.1	3003.7	3032.8	3130.0	3173.2	*3151.6*	3011.2	2604.0	1973.4
25°	3478.1	3453.2	3367.6	3284.5	3229.7	3273.7	3332.7	*3343.5*	3253.0	2830.9	2144.5
27.5°	3940.1	3917.7	3821.3	3696.7	3539.6	3463.2	3507.2	*3528.8*	3490.6	3100.9	2326.5
30°	4373.0	4343.1	4237.6	4083.0	3901.1	3783.9	3734.1	*3749.0*	3771.4	3420.8	2540.1
32.5°	4748.6	4726.1	4599.9	4437.0	4261.7	4139.5	4023.2	*4048.1*	4103.0	3812.2	2813.4
35°	5066.8	5055.2	4921.4	4759.4	4574.1	4511.8	4412.1	*4417.1*	4471.9	4284.9	3146.6
37.5°	5343.5	5323.6	5202.3	5051.9	4904.8	4894.8	4867.4	*4869.9*	4898.1	4835.8	3529.7
40°	5518.0	5499.7	5413.3	5320.2	5215.5	5217.2	5359.3	*5370.1*	5337.7	5376.7	3934.3
42.5°	5583.6	5570.3	5523.8	5524.6	5513.8	5562.9	5829.6	*5849.5*	5733.2	5801.3	4280.0
45°	5469.8	5464.0	5467.3	5587.0	5716.6	5867.8	6214.3	*6249.2*	6084.7	6083.0	4550.0
47.5°	5102.5	5090.9	5188.1	5391.7	5691.7	5985.8	6446.9	*6500.9*	6330.6	6244.2	4719.5
50°	*4383.0*	*4416.2*	*4569.9*	*4875.7*	*5331.9*	*5823.8*	*6444.4*	*6538.3*	*6339.8*	*6230.1*	*4691.3*
52.5°	3174.9	3168.2	3504.7	3925.2	4480.2	5305.3	6102.1	*6239.2*	6117.9	6091.3	4628.1
55°	1727.4	1788.1	2014.9	2571.6	3264.6	4324.0	5320.2	*5619.4*	5759.8	6040.6	4741.9
57.5°	634.8	661.4	803.5	1197.3	1728.3	2688.8	4063.9	*4515.1*	4948.8	5899.4	4722.8
60°	255.9	260.9	317.4	440.4	726.2	1368.5	2437.9	*2838.3*	3247.1	4515.9	3624.4
62.5°	186.1	192.8	215.2	257.6	367.3	598.2	1051.1	*1222.3*	1336.1	2236.8	1785.6
65°	150.4	155.4	173.7	192.8	242.6	321.6	339.0	*326.5*	324.9	578.3	409.6
67.5°	124.6	129.6	142.9	156.2	174.5	160.4	116.3	*122.1*	99.7	98.9	80.6
70°	91.4	97.2	110.5	124.6	104.7	43.2	67.3	*99.7*	75.6	63.1	61.5
72.5°	69.0	73.1	85.6	81.4	30.7	16.6	44.9	*72.3*	58.2	46.5	45.7
75°	51.5	54.0	43.2	13.3	3.3	4.2	16.6	*29.9*	32.4	26.6	26.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	*2.5*	3.3	4.2	5.0
80°	0.0	0.0	0.0	0.0	0.0	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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Scaled Data Report

REPORT NUMBER: P633542
CATALOG NUMBER: GWS-SA2E-830-U-T2R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	928.1	928.1	928.1	928.1	928.1	928.1	928.1	928.1	928.1	928.1	928.1
2.5°	947.2	912.3	862.5	820.9	789.4	758.6	735.3	712.1	711.2	699.6	697.1
5°	987.1	924.0	832.6	766.9	727.0	702.9	686.3	678.0	673.9	669.7	668.0
7.5°	1044.4	953.9	827.6	757.8	724.5	708.8	697.1	692.1	689.6	686.3	685.5
10°	1115.1	997.1	845.9	775.2	746.1	731.2	718.7	711.2	707.1	701.3	699.6
12.5°	1199.8	1050.3	874.9	804.3	773.6	753.6	737.0	726.2	720.4	712.9	711.2
15°	1291.2	1107.6	907.3	830.9	794.3	768.6	747.8	731.2	720.4	711.2	708.8
17.5°	1385.9	1165.8	936.4	849.2	804.3	773.6	743.7	721.2	707.9	696.3	693.0
20°	1492.3	1225.6	955.5	852.5	801.0	760.3	725.4	697.1	683.8	668.0	664.7
22.5°	1603.6	1281.2	963.8	845.0	782.7	735.3	698.0	668.9	649.8	633.1	628.2
25°	1711.7	1331.1	959.7	824.3	755.3	700.4	662.2	632.3	611.5	594.9	590.8
27.5°	1826.3	1372.6	944.7	793.5	717.9	662.2	625.7	599.9	580.8	562.5	558.4
30°	1955.1	1410.9	920.6	756.1	673.9	623.2	594.9	577.5	556.7	537.6	531.8
32.5°	2110.5	1444.9	885.7	711.2	634.8	589.1	573.3	560.0	535.9	516.0	511.8
35°	2288.3	1473.2	841.7	664.7	596.6	567.5	564.2	546.7	515.2	491.9	486.9
37.5°	2494.4	1500.6	789.4	619.0	568.3	557.5	558.4	528.5	490.2	462.0	458.7
40°	2716.2	1528.0	731.2	579.1	542.6	551.7	544.2	501.9	439.5	412.1	408.8
42.5°	2947.2	1557.9	672.2	541.7	521.0	529.3	518.5	448.7	403.8	389.7	388.0
45°	3155.8	1593.7	608.2	504.4	499.4	496.9	478.6	406.3	387.2	377.2	376.4
47.5°	3306.1	1587.8	540.1	468.6	476.1	467.8	412.1	386.4	370.6	357.3	354.0
50°	*3278.7*	*1486.5*	*469.5*	*428.7*	*446.2*	*438.7*	*370.6*	*363.1*	*349.0*	*334.9*	*329.9*
52.5°	3208.9	1348.5	408.0	386.4	413.8	396.3	342.3	334.9	322.4	304.1	298.3
55°	3246.3	1218.9	359.8	352.3	380.6	328.2	310.8	299.1	285.8	265.9	263.4
57.5°	3125.8	994.6	289.2	294.1	336.5	280.0	272.5	254.3	231.8	218.5	216.9
60°	2163.7	534.3	181.1	187.0	243.5	235.1	244.3	227.7	200.2	187.8	185.3
62.5°	993.8	214.4	98.9	94.7	128.0	159.5	209.4	207.7	173.7	153.7	152.1
65°	241.0	98.0	70.6	66.5	72.3	95.6	136.3	163.7	140.4	117.2	114.7
67.5°	78.1	79.8	64.8	60.7	64.0	71.5	81.4	90.6	89.7	82.3	80.6
70°	62.3	72.3	59.8	54.8	54.8	57.3	54.8	44.0	38.2	41.5	43.2
72.5°	46.5	54.8	47.4	42.4	40.7	39.9	34.1	24.9	17.4	15.8	15.0
75°	27.4	30.7	29.1	24.9	23.3	20.8	16.6	10.8	5.8	4.2	2.5
77.5°	5.0	5.8	6.6	5.0	4.2	3.3	2.5	0.8	0.0	0.0	0.0
80°	0.0	0.8	0.8	0.8	0.0	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

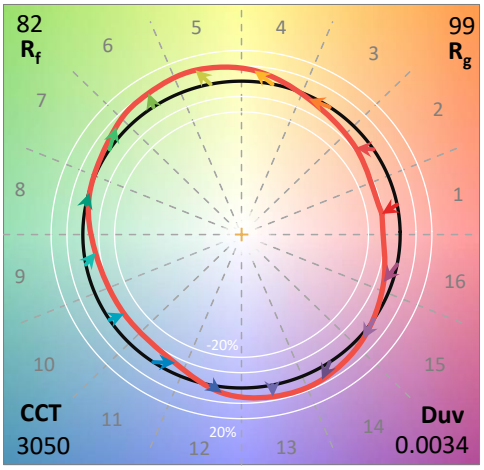
Test Information

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

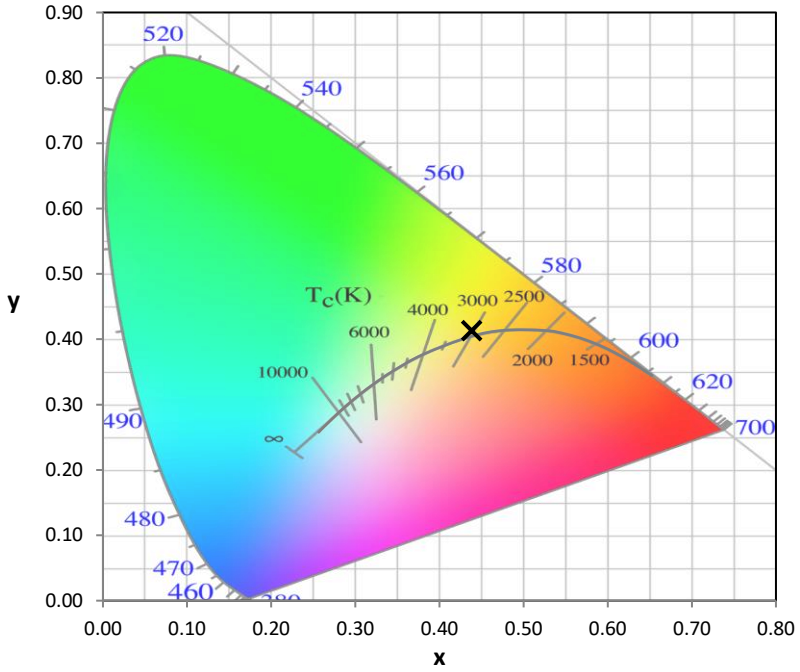
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

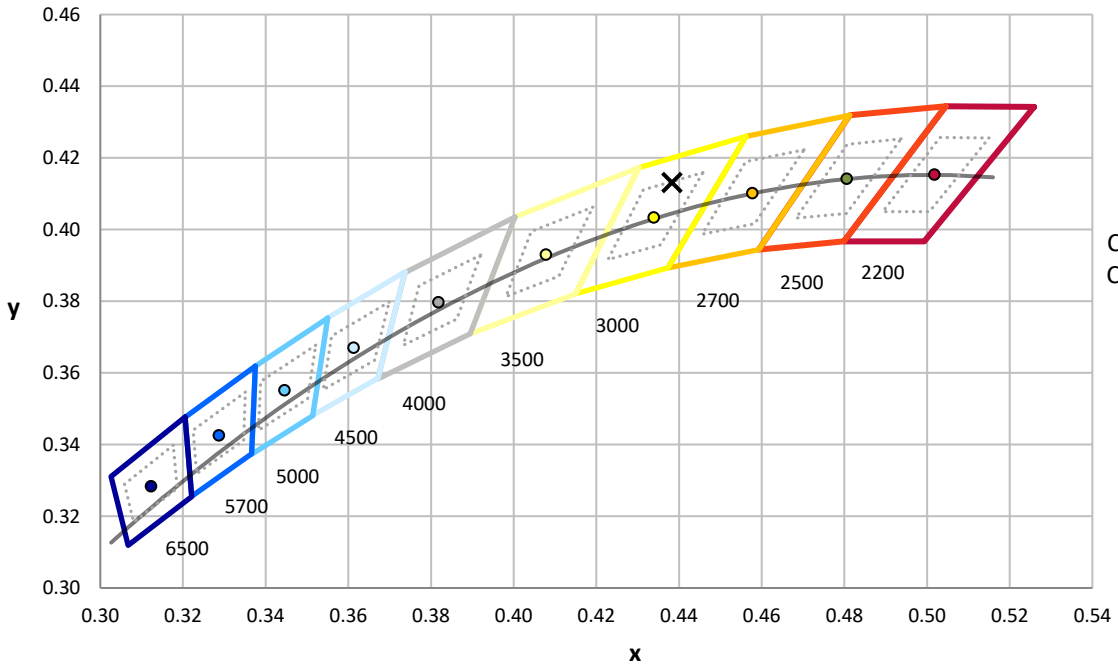
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

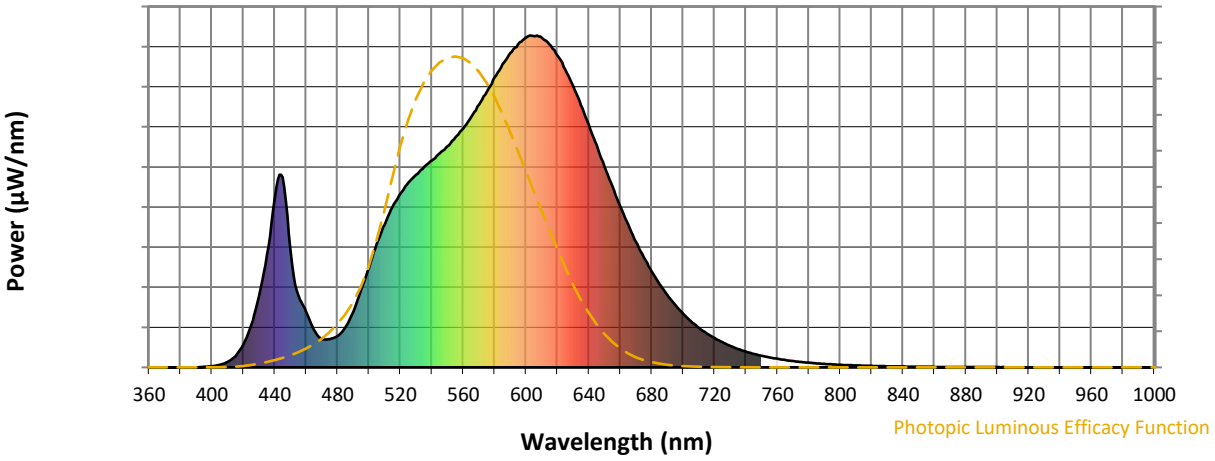


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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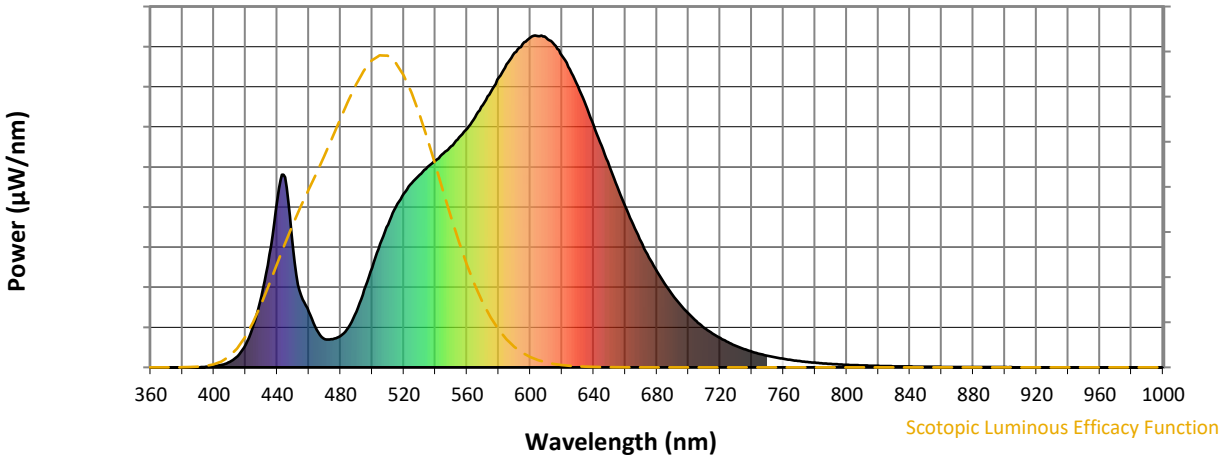
Scotopic Flux vs. Wavelength



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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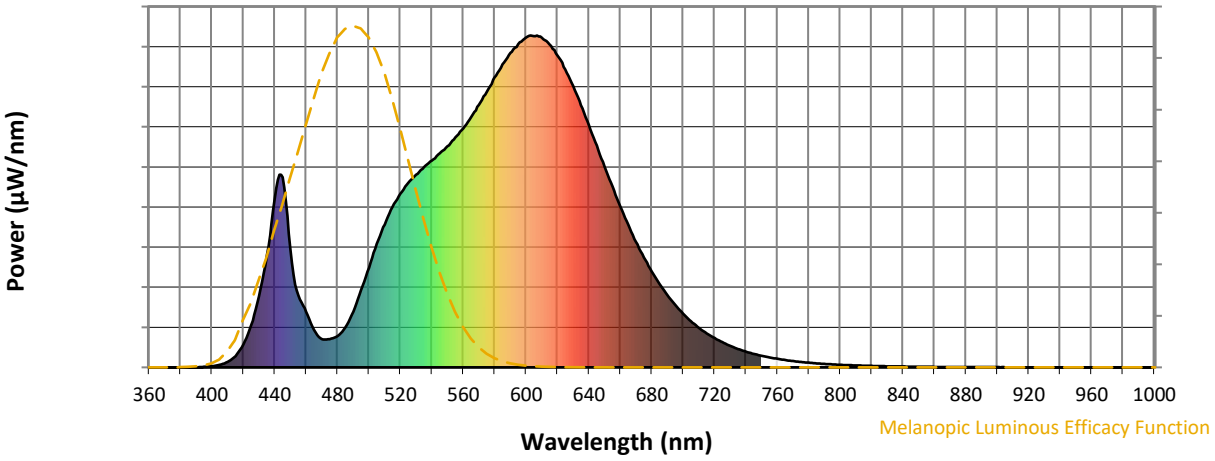
Melanopic Flux vs. Wavelength



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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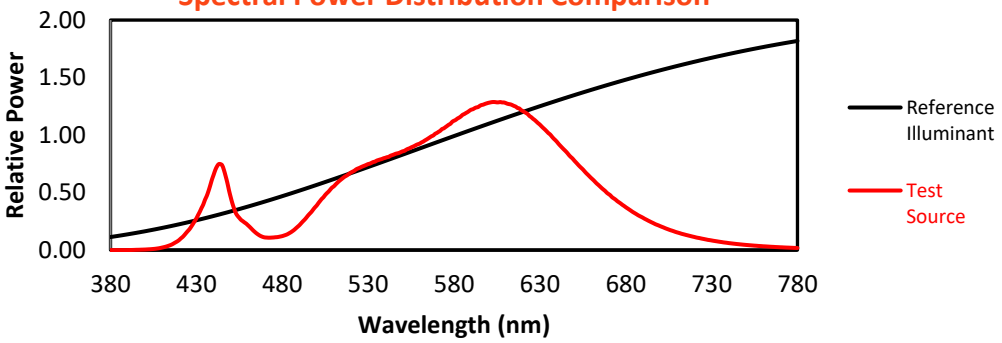
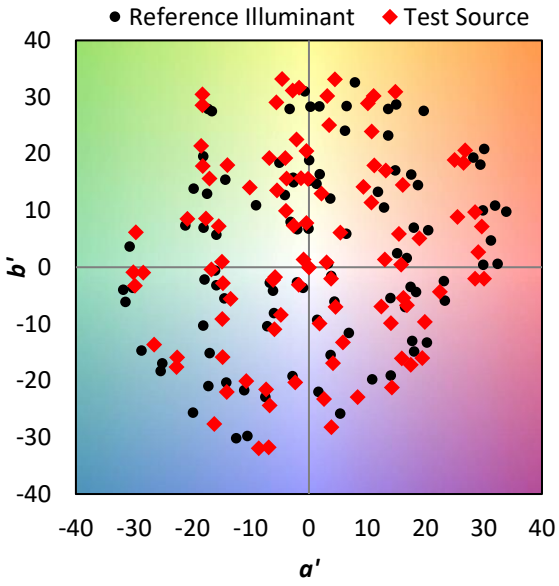
Summary

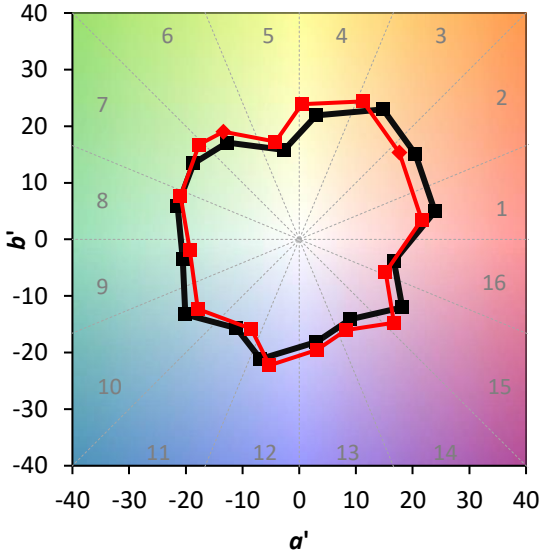
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

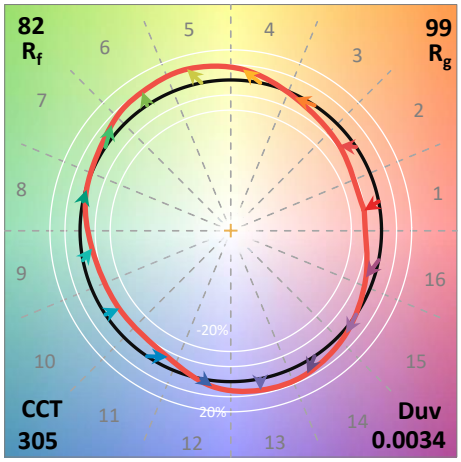
Spectral Power Distribution Comparison

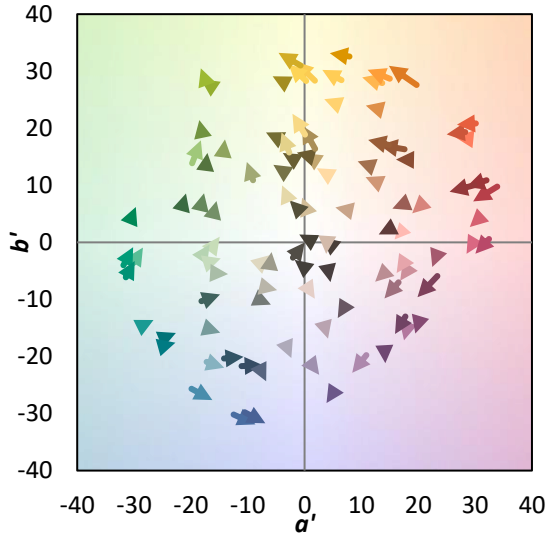


Color Vector Graphics









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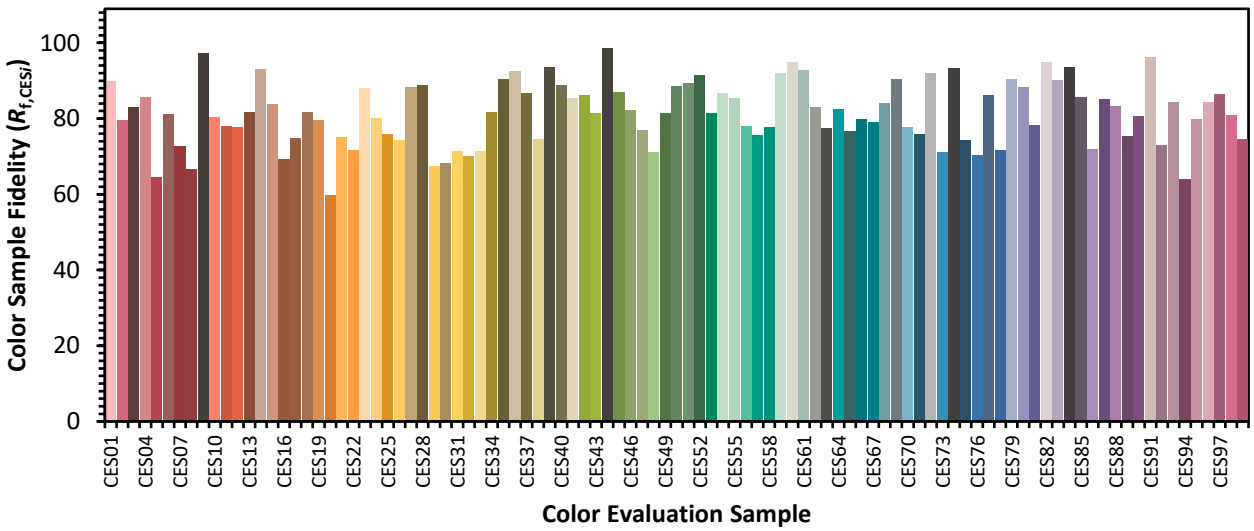
Individual Sample Fidelity Index ($R_{f,i}$)

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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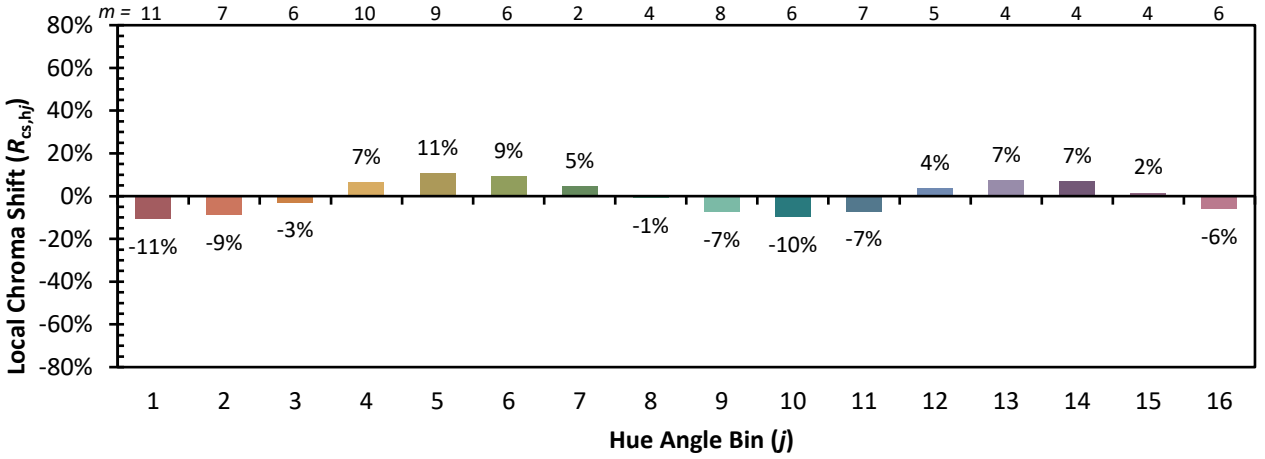
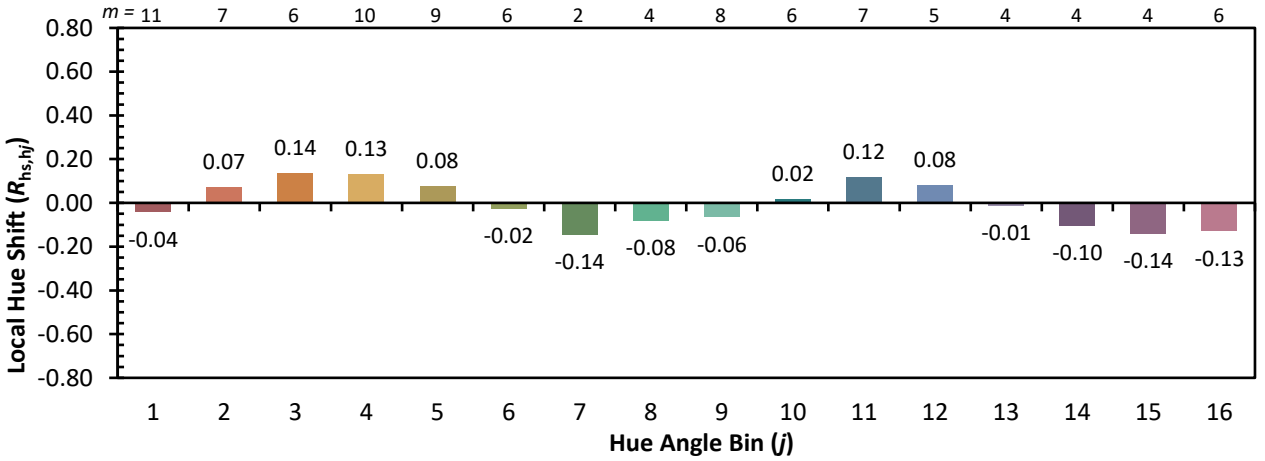
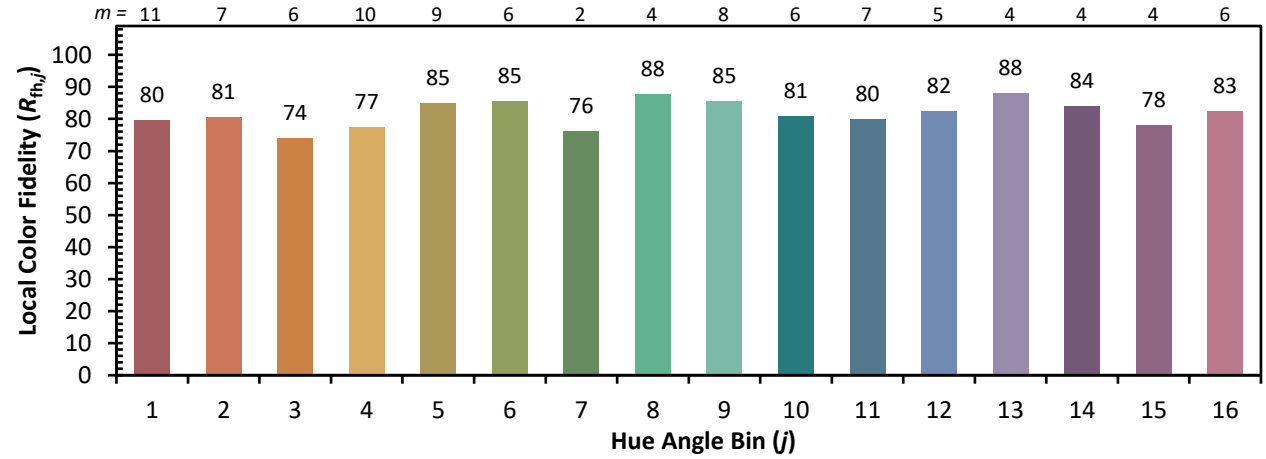
Color Rendition by Hue-Angle Bin







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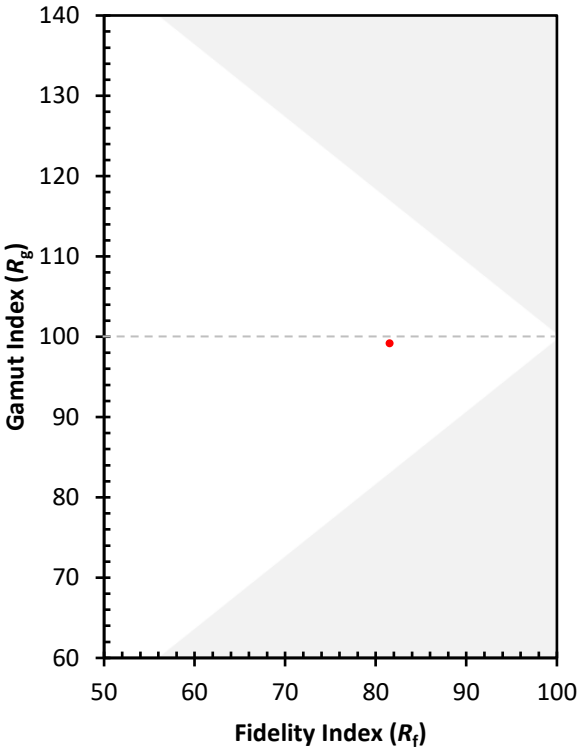
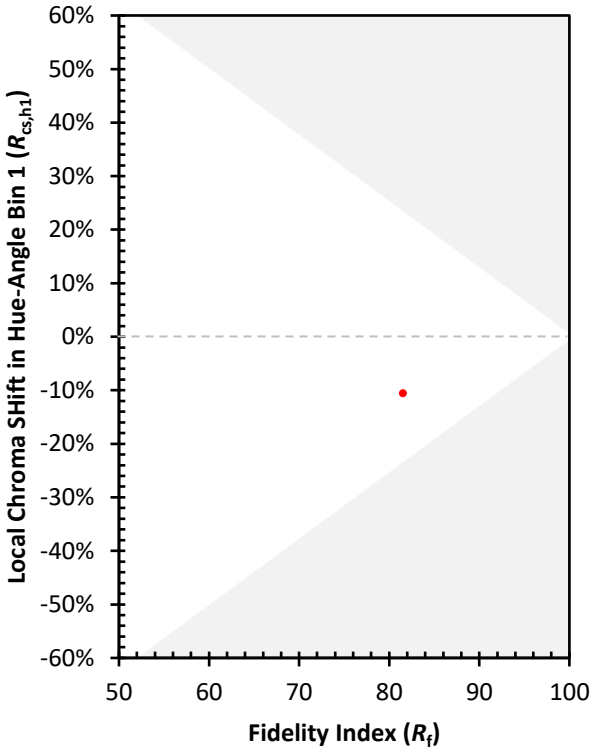
Measure Comparisons





(END OF REPORT)