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: P638500

Luminaire Tested: GWS-SA4E-830-U-T3R-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:	P638500
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-16)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4E-830-U-T3R-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	15247.2 lumens
Efficiency:	N/A
Efficacy:	75.3 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G1

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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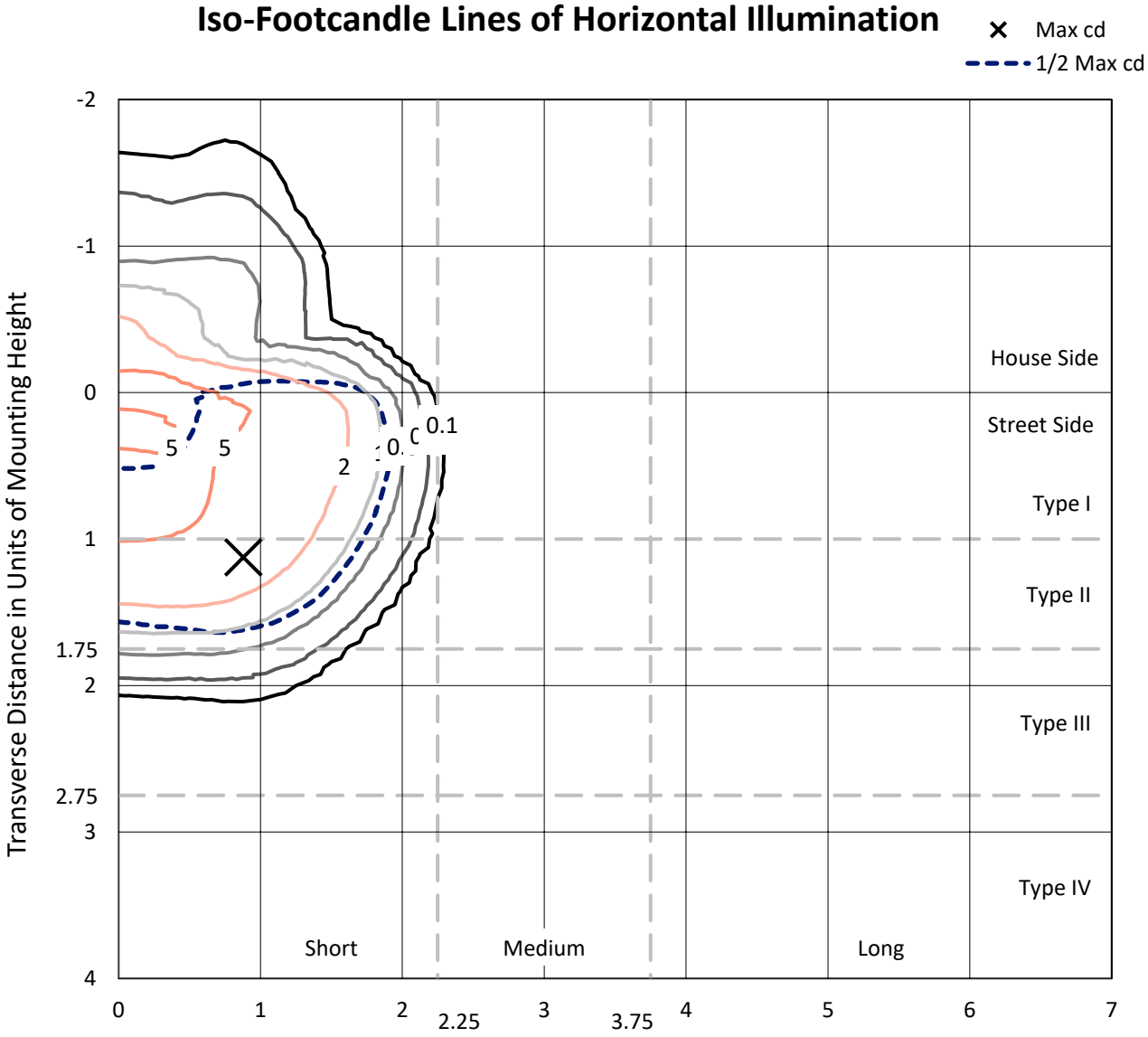
Scaled Data Report

REPORT NUMBER: P638500
CATALOG NUMBER: GWS-SA4E-830-U-T3R-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
Type II - Short - N/A

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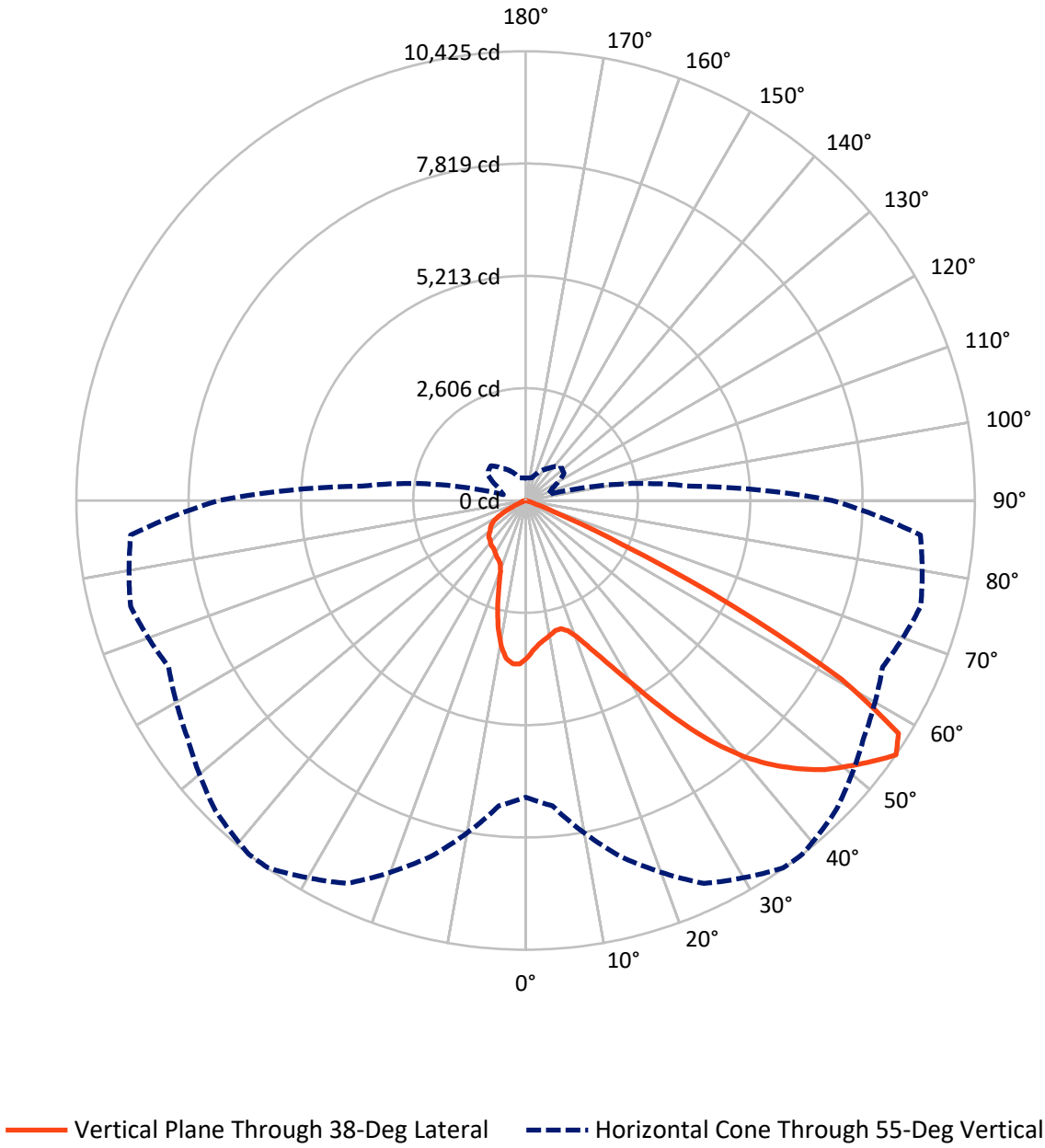
Luminous Intensity Polar Plot



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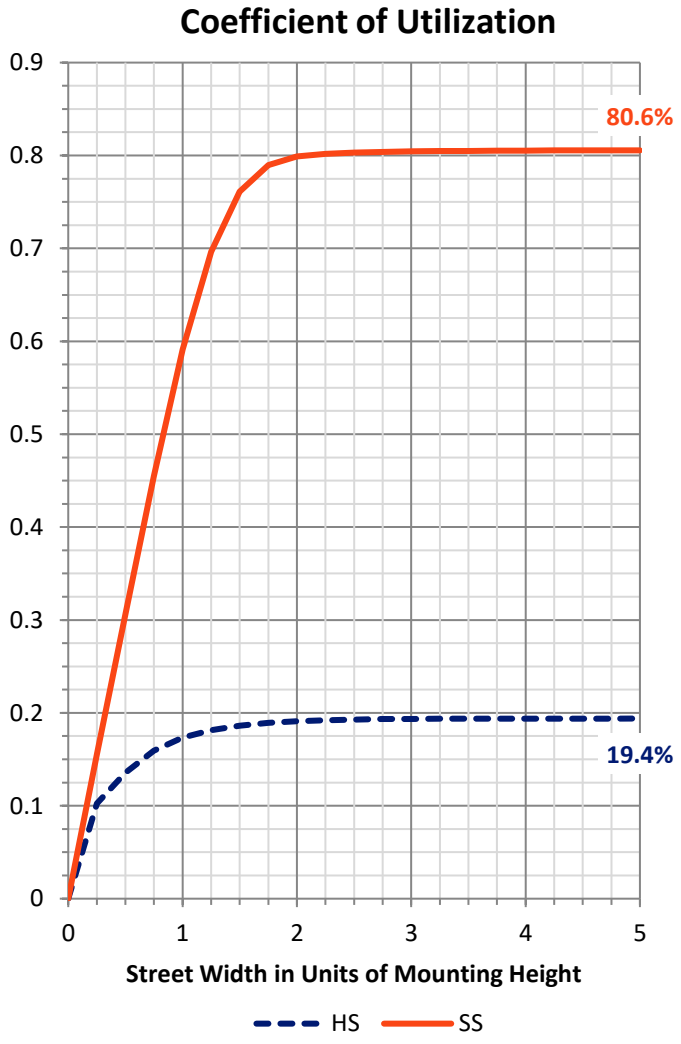
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2970.6	0.0	2970.6
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	12276.6	0.0	12276.6
	% Fixture	80.5	0.0	80.5
Total	Lumens	15247.2	0.0	15247.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.1	2.2
10°-20°	910.2	6.0
20°-30°	1561.9	10.2
30°-40°	2590.5	17.0
40°-50°	3808.1	25.0
50°-60°	4449.9	29.2
60°-70°	1508.4	9.9
70°-80°	77.1	0.5
80°-90°	3.0	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°	15247.2	100.0
0°-180°	15247.2	100.0



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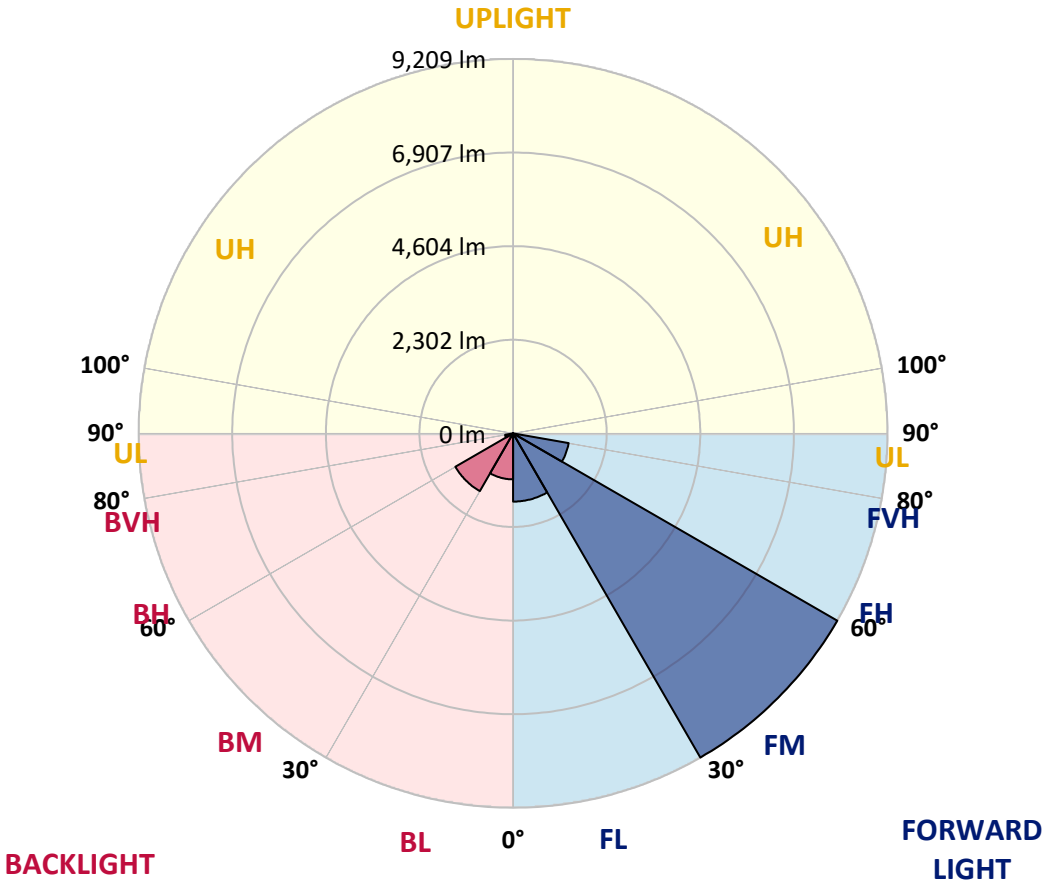
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1678.3	11.0			
FM	(30°-60°)	9208.9	60.4			
FH	(60°-80°)	1387.7	9.1			G1/1800
FVH	(80°-90°)	1.6	0.0			G0/10
BL	(0°-30°)	1131.8	7.4	B3/2500		
BM	(30°-60°)	1639.7	10.8	B2/2500		
BH	(60°-80°)	197.8	1.3	B1/500		G1/500
BVH	(80°-90°)	1.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1
Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4
2.5°	3405.4	3398.5	3412.4	3440.3	3466.4	3475.1	3501.3	3537.9	3560.5	3614.6	3658.1
5°	3252.1	3248.6	3262.5	3286.9	3321.8	3334.0	3374.1	3435.1	3496.1	3590.2	3682.5
7.5°	3112.6	3110.9	3131.8	3185.8	3236.4	3252.1	3300.9	3375.8	3457.7	3602.4	3738.3
10°	2929.6	2931.4	2971.5	3048.2	3140.5	3171.9	3250.3	3358.4	3464.7	3651.2	3839.4
12.5°	2870.4	2873.9	2894.8	2954.0	3055.1	3095.2	3205.0	3368.8	3504.8	3720.9	3970.1
15°	3015.0	3015.0	2997.6	3004.6	3049.9	3086.5	3201.5	3403.7	3572.7	3804.5	4099.1
17.5°	3295.6	3285.2	3241.6	3182.4	3166.7	3178.9	3271.2	3478.6	3668.6	3902.1	4245.5
20°	3675.6	3679.1	3593.7	3469.9	3370.6	3368.8	3424.6	3611.1	3806.3	4018.9	4404.1
22.5°	4135.7	4121.7	4008.4	3839.4	3666.9	3652.9	3675.6	3813.2	4005.0	4203.6	4599.3
25°	4669.0	4662.0	4501.7	4275.1	4046.8	4013.7	4013.7	4149.6	4289.0	4466.8	4832.8
27.5°	5226.7	5226.7	5071.5	4810.1	4506.9	4447.6	4438.9	4599.3	4691.6	4726.5	5029.7
30°	5800.0	5793.1	5639.7	5371.3	5047.2	4986.2	4961.8	5080.3	5146.5	5041.9	5275.5
32.5°	6382.1	6394.3	6239.2	5990.0	5700.7	5660.6	5585.7	5585.7	5639.7	5493.3	5662.4
35°	7007.8	7004.3	6882.3	6713.3	6465.8	6420.5	6296.7	6103.3	6185.2	6120.7	6197.4
37.5°	7560.3	7586.4	7527.2	7401.7	7201.3	7155.9	6952.0	6601.7	6664.5	6765.6	6833.5
40°	8121.5	8142.4	8201.6	8161.5	7908.8	7825.2	7462.7	6887.5	6957.3	7304.1	7499.3
42.5°	8672.2	8682.6	8802.9	8869.1	8531.0	8384.6	7849.6	7061.8	7135.0	7725.8	8067.4
45°	9022.5	9045.1	9243.8	9446.0	9080.0	8879.6	8185.9	7284.9	7316.3	8018.6	8487.4
47.5°	9008.5	9060.8	9433.8	9801.5	9552.3	9336.2	8590.3	7642.2	7589.9	8294.0	8764.5
50°	8727.9	8790.7	9325.7	9909.6	9892.1	9691.7	9039.9	8159.8	7996.0	8538.0	8799.4
52.5°	8145.8	8327.1	9135.8	9923.5	10165.8	10064.7	9595.9	8856.9	8545.0	8888.3	8855.2
55°	6887.5	7110.6	8558.9	9805.0	10413.2	10425.4	10179.7	9583.7	9141.0	9491.3	9198.5
57.5°	5228.4	5406.2	6587.8	8727.9	10003.7	10204.1	10406.3	9967.1	9508.7	9902.6	9278.7
60°	3151.0	3356.6	4125.2	6404.8	8079.6	8421.2	9214.2	9128.8	8576.3	8745.4	7609.1
62.5°	1277.5	1385.5	1904.9	3529.2	5085.5	5404.4	6164.3	6293.3	6157.3	5984.8	4614.9
65°	467.1	510.6	763.3	1458.7	2338.8	2455.6	2856.4	3084.8	3273.0	2786.7	1716.7
67.5°	289.3	317.2	496.7	749.4	850.5	791.2	805.2	960.3	916.7	566.4	306.7
70°	214.4	237.0	388.6	519.4	343.3	264.9	179.5	191.7	172.5	151.6	149.9
72.5°	148.1	169.1	291.0	306.7	132.5	94.1	66.2	92.4	104.6	102.8	106.3
75°	97.6	113.3	183.0	120.3	33.1	26.1	22.7	48.8	62.7	62.7	64.5
77.5°	57.5	66.2	64.5	24.4	7.0	7.0	5.2	8.7	13.9	15.7	19.2
80°	7.0	5.2	3.5	3.5	3.5	3.5	3.5	3.5	5.2	5.2	5.2
82.5°	1.7	1.7	1.7	3.5	3.5	3.5	3.5	3.5	3.5	5.2	5.2
85°	0.0	0.0	1.7	1.7	3.5	3.5	3.5	3.5	3.5	5.2	5.2
87.5°	0.0	0.0	1.7	1.7	3.5	3.5	3.5	3.5	3.5	5.2	5.2
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: P638500
CATALOG NUMBER: GWS-SA4E-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4	3656.4
2.5°	3691.3	3679.1	3729.6	3766.2	3795.8	3809.8	3790.6	3788.8	3788.8	3750.5	3740.0
5°	3734.8	3740.0	3811.5	3842.9	3848.1	3830.7	3787.1	3757.5	3740.0	3700.0	3677.3
7.5°	3818.5	3835.9	3903.9	3898.6	3851.6	3771.4	3656.4	3567.5	3510.0	3447.3	3408.9
10°	3938.7	3971.8	4013.7	3940.5	3790.6	3586.7	3349.7	3180.6	3079.5	3008.1	2964.5
12.5°	4085.1	4118.2	4104.3	3931.8	3619.8	3255.6	2950.6	2706.6	2589.8	2525.3	2480.0
15°	4233.3	4254.2	4163.6	3827.2	3318.3	2828.6	2488.7	2246.5	2103.6	2051.3	2012.9
17.5°	4384.9	4379.7	4174.0	3621.5	2915.7	2347.6	2012.9	1847.4	1807.3	1798.6	1795.1
20°	4543.5	4496.4	4132.2	3327.0	2431.2	1871.8	1681.8	1692.3	1765.5	1800.3	1807.3
22.5°	4724.7	4606.2	4027.6	2927.9	1936.3	1559.8	1579.0	1681.8	1781.1	1828.2	1835.2
25°	4918.2	4707.3	3853.3	2415.5	1526.7	1434.3	1547.6	1666.1	1772.4	1829.9	1836.9
27.5°	5045.4	4731.7	3567.5	1899.7	1310.6	1385.5	1505.8	1619.1	1728.9	1791.6	1800.3
30°	5183.1	4721.2	3178.9	1464.0	1237.4	1343.7	1448.3	1551.1	1652.2	1721.9	1728.9
32.5°	5385.3	4714.3	2704.8	1188.6	1207.8	1310.6	1387.3	1472.7	1542.4	1582.5	1577.2
35°	5650.2	4705.6	2152.4	1071.8	1190.3	1284.4	1345.4	1385.5	1308.8	1284.4	1289.7
37.5°	5990.0	4726.5	1687.0	1023.0	1185.1	1277.5	1329.8	1214.7	1096.2	1050.9	1043.9
40°	6366.5	4780.5	1286.2	1003.9	1202.5	1294.9	1270.5	1080.5	934.1	845.3	826.1
42.5°	6744.6	4839.8	1017.8	996.9	1232.2	1343.7	1172.9	982.9	763.3	712.8	705.8
45°	7025.2	4829.3	880.1	984.7	1258.3	1371.6	1146.8	843.5	681.4	658.8	660.5
47.5°	7166.4	4714.3	805.2	956.8	1268.8	1343.7	1082.3	786.0	625.7	650.1	671.0
50°	7091.5	4416.3	735.5	902.8	1246.1	1307.1	979.5	742.4	597.8	698.9	745.9
52.5°	7000.8	4050.3	658.8	819.1	1192.1	1256.6	939.4	730.2	580.4	674.5	709.3
55°	*7121.1*	*3818.5*	*533.3*	*690.1*	*1085.8*	*1138.0*	*908.0*	*728.5*	*540.3*	*524.6*	*519.4*
57.5°	6952.0	3356.6	381.7	496.7	833.1	901.0	885.3	716.3	479.3	477.5	484.5
60°	5373.1	2047.8	261.4	315.4	510.6	575.1	803.4	684.9	413.0	379.9	381.7
62.5°	3053.4	871.4	179.5	195.2	261.4	310.2	613.5	622.2	381.7	362.5	381.7
65°	1063.1	312.0	139.4	130.7	144.7	165.6	352.0	481.0	346.8	313.7	317.2
67.5°	219.6	155.1	123.7	108.1	108.1	108.1	179.5	299.8	285.8	249.2	252.7
70°	139.4	132.5	108.1	92.4	88.9	81.9	102.8	165.6	196.9	181.3	183.0
72.5°	102.8	101.1	85.4	74.9	66.2	59.3	64.5	81.9	101.1	104.6	106.3
75°	62.7	64.5	55.8	47.1	41.8	36.6	38.3	38.3	38.3	34.9	38.3
77.5°	19.2	20.9	17.4	13.9	12.2	12.2	12.2	10.5	8.7	5.2	5.2
80°	5.2	5.2	5.2	5.2	5.2	3.5	3.5	1.7	1.7	0.0	0.0
82.5°	5.2	5.2	5.2	5.2	3.5	3.5	1.7	1.7	0.0	0.0	0.0
85°	5.2	5.2	5.2	5.2	3.5	3.5	1.7	1.7	0.0	0.0	0.0
87.5°	5.2	5.2	5.2	5.2	3.5	3.5	1.7	1.7	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

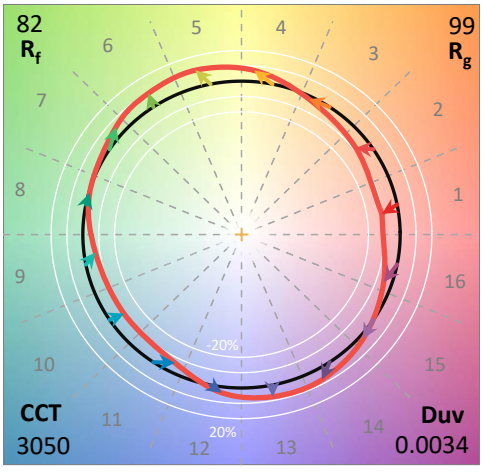
Test Information

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

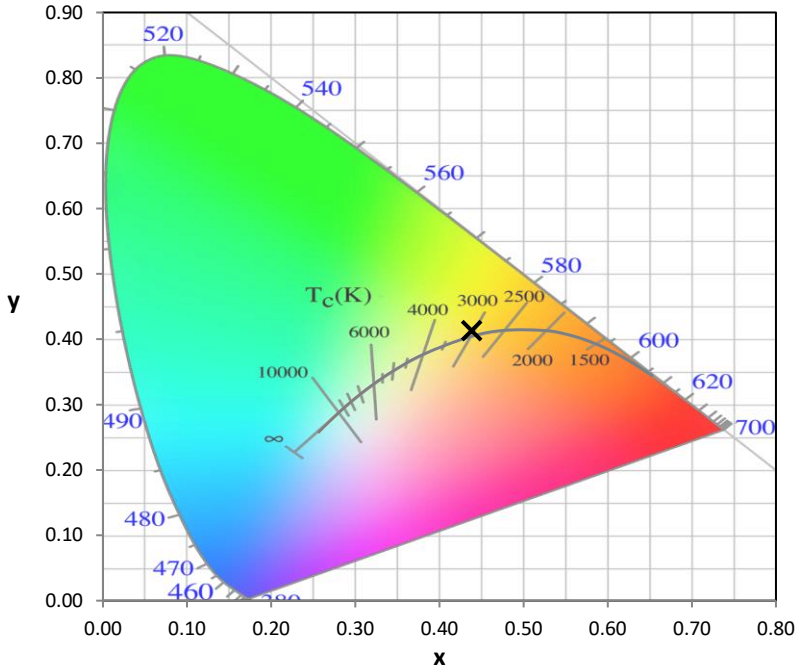
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

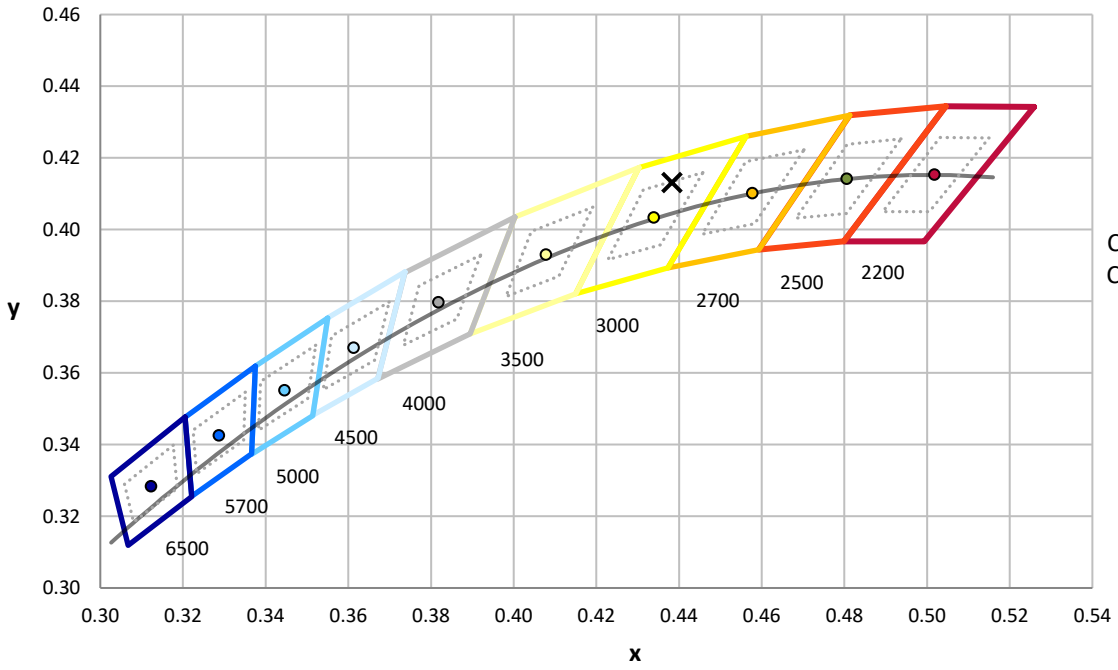
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

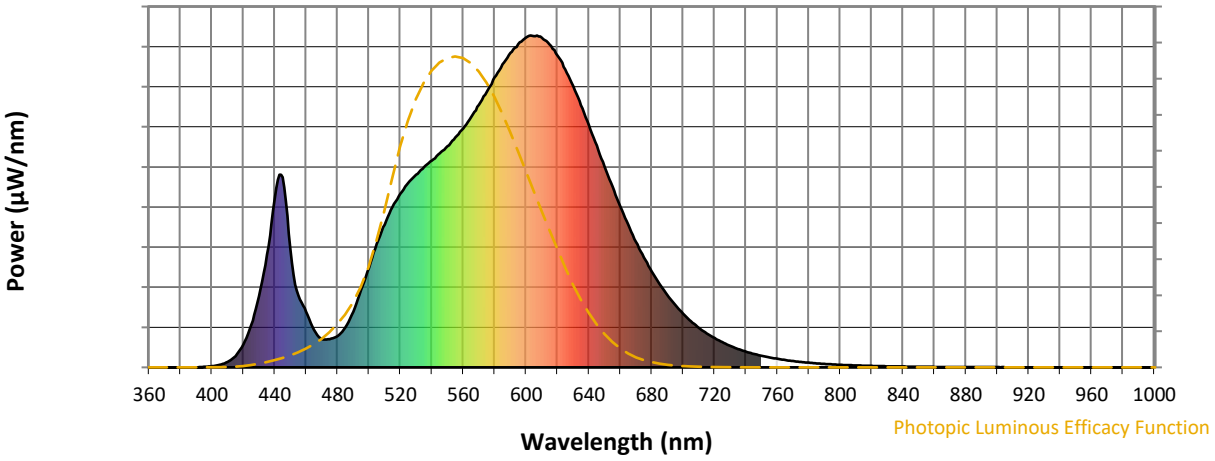


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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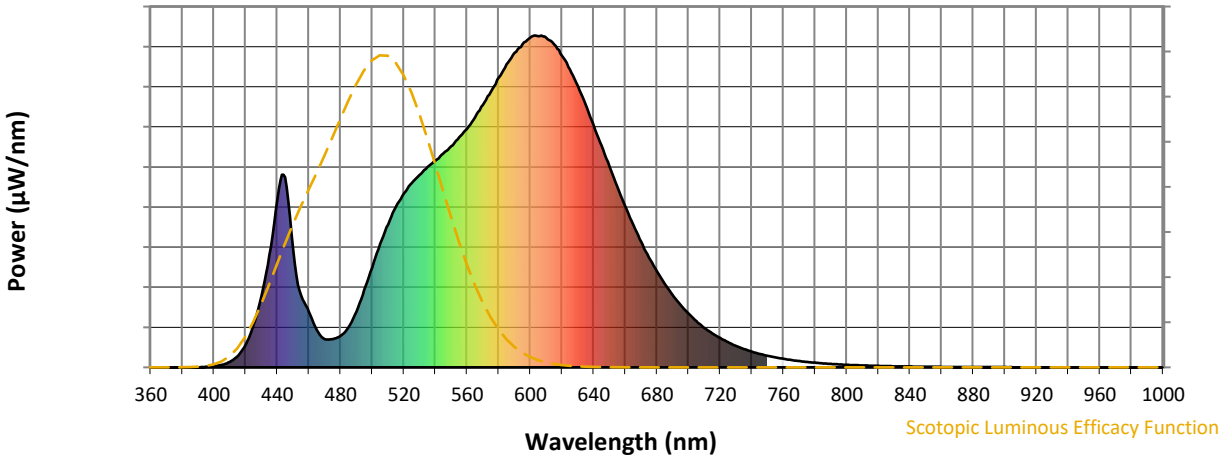
Scotopic Flux vs. Wavelength



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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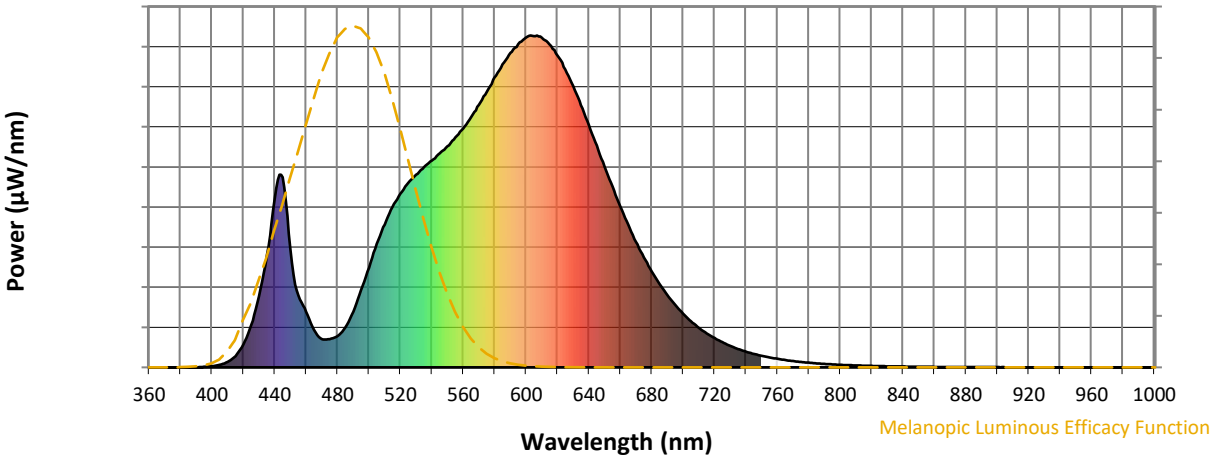
Melanopic Flux vs. Wavelength



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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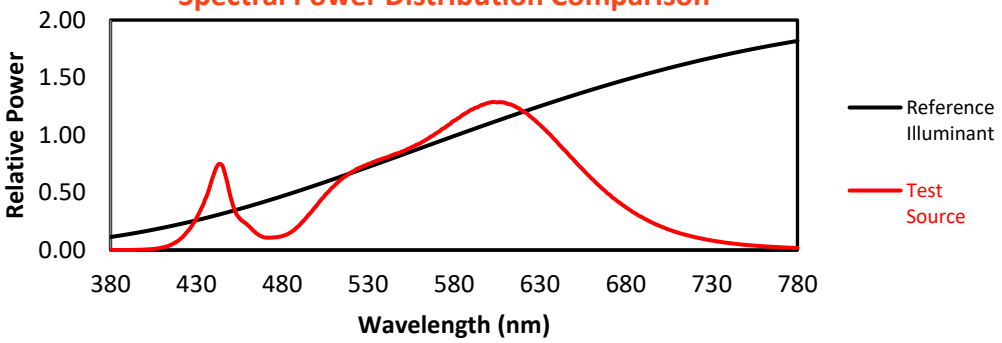
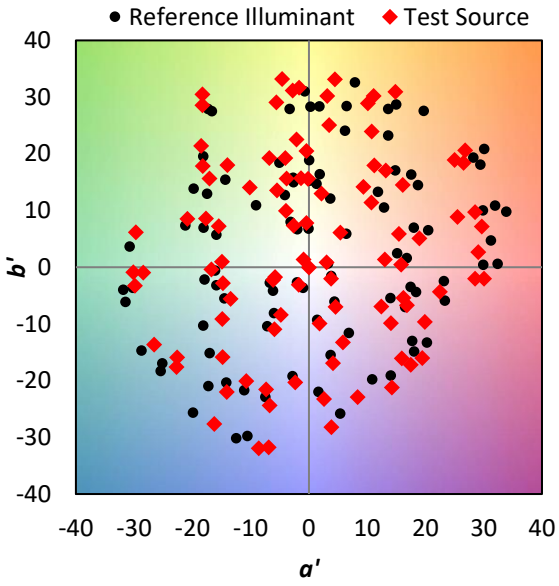
Summary

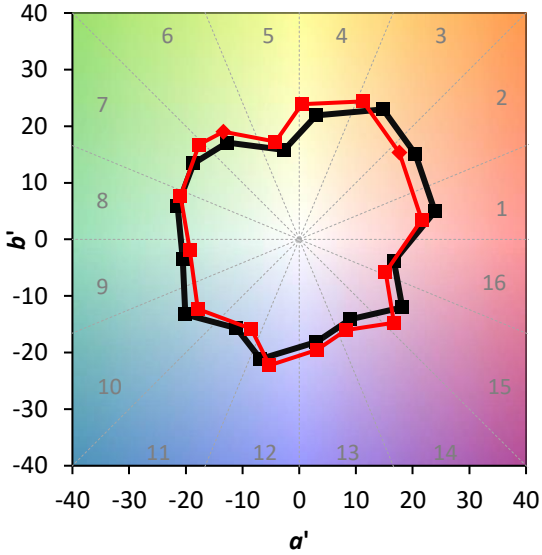
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

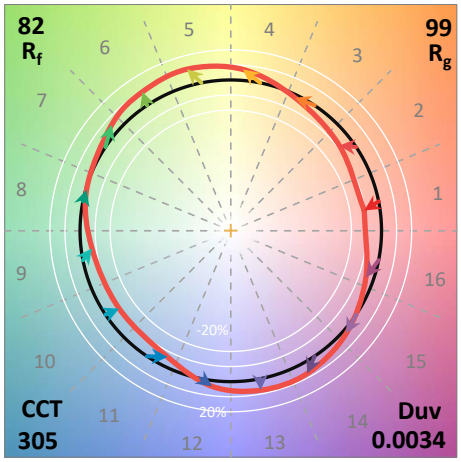
Spectral Power Distribution Comparison

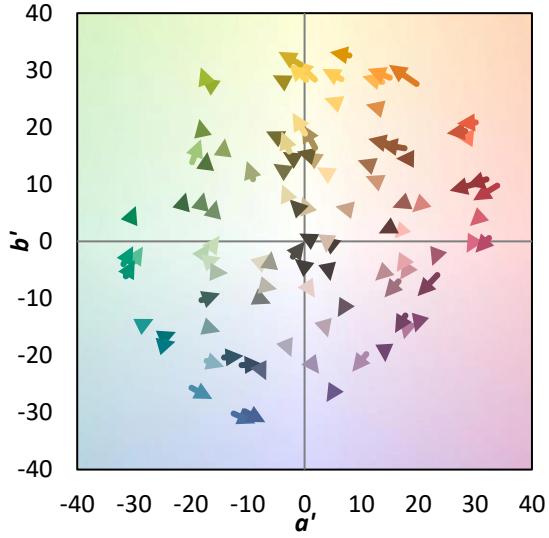


Color Vector Graphics









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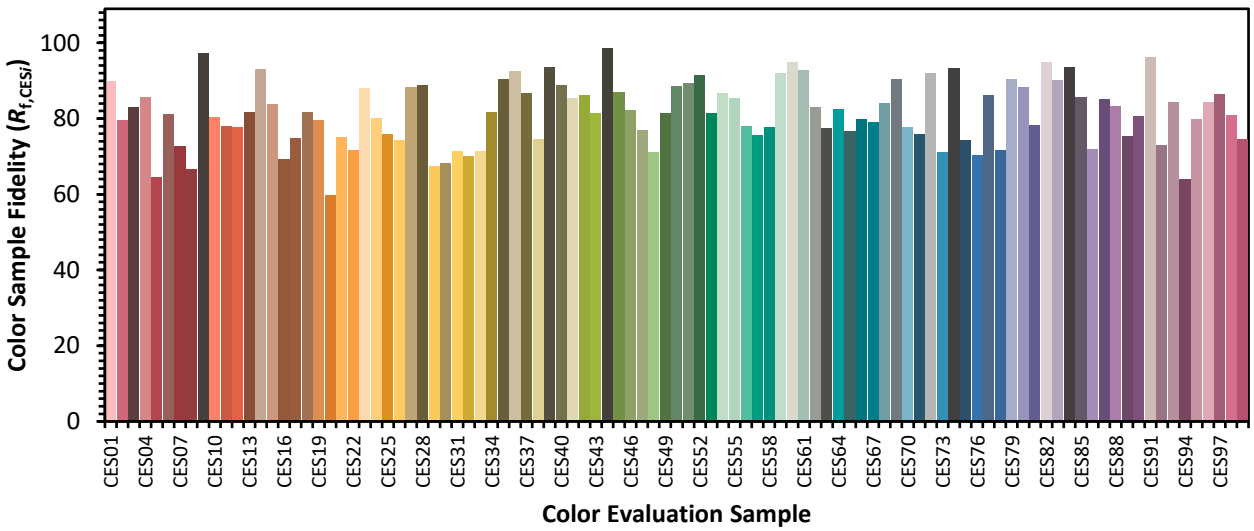
Individual Sample Fidelity Index ($R_{f,i}$)

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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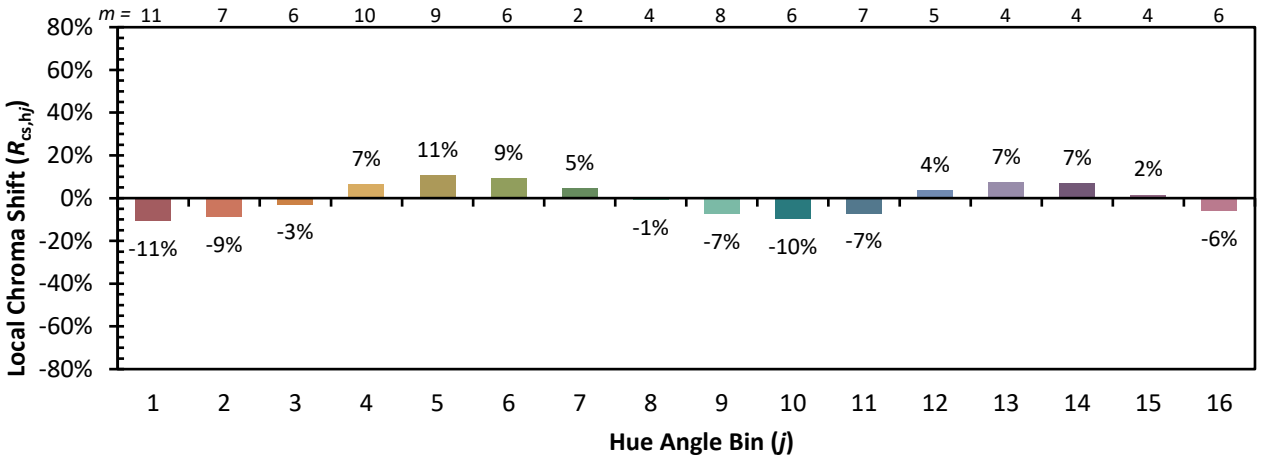
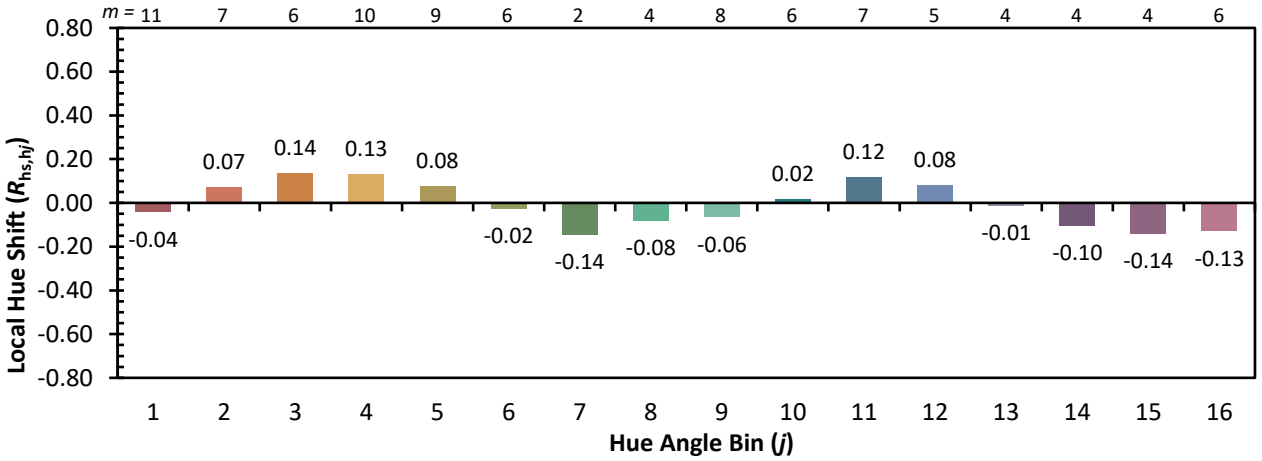
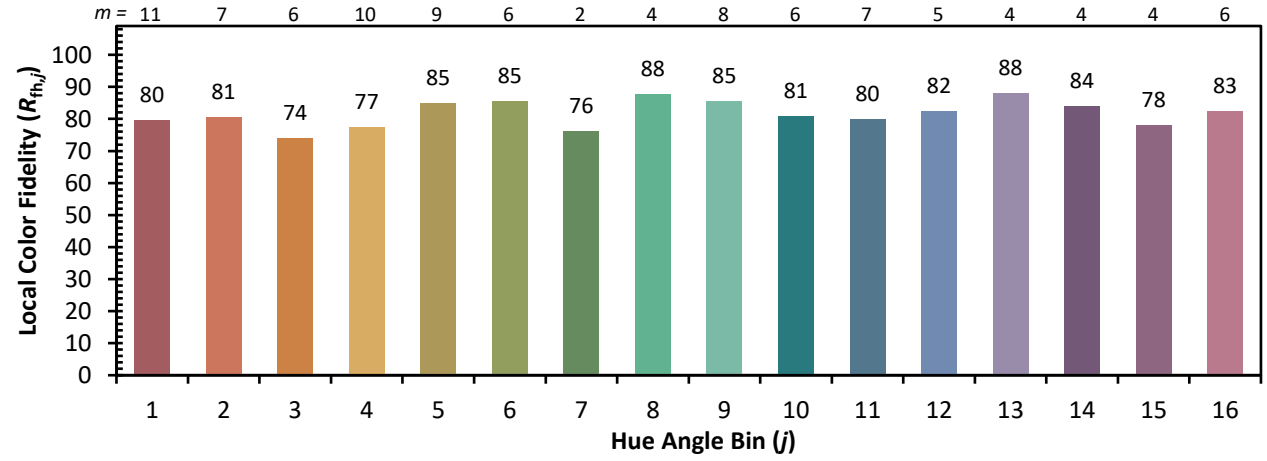
Color Rendition by Hue-Angle Bin







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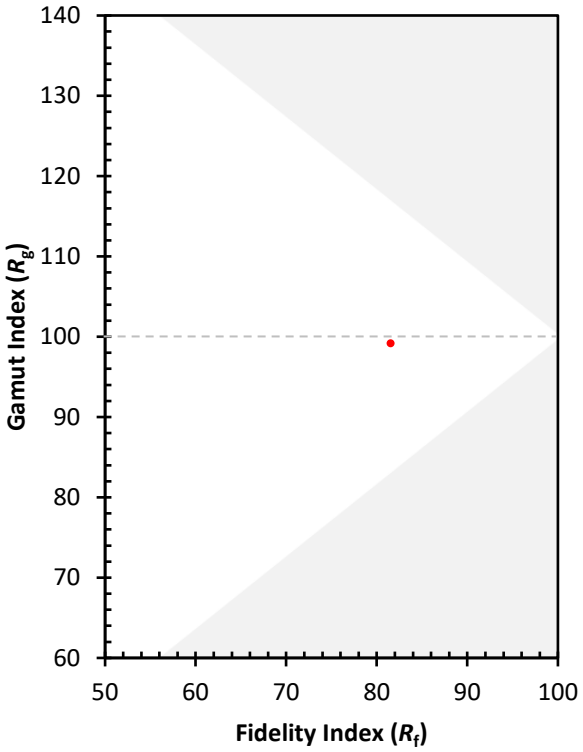
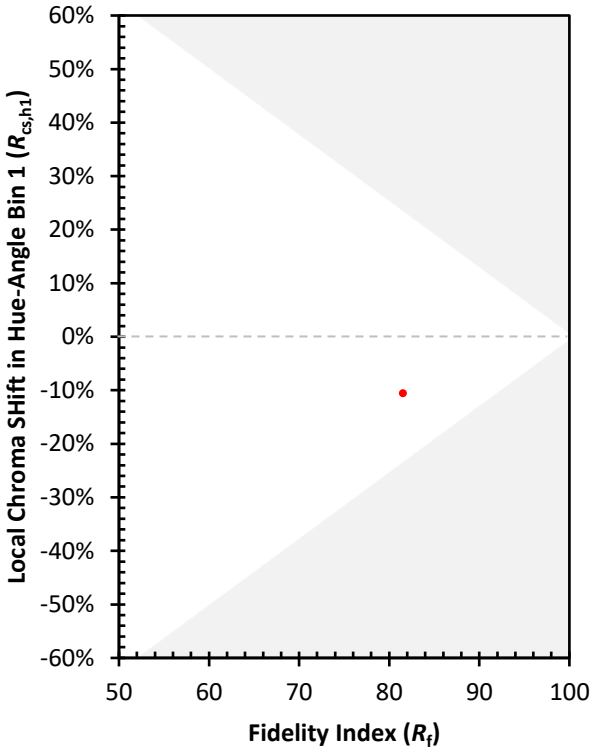
Measure Comparisons





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