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: P640456

Luminaire Tested: GWS-SA5D-830-U-SL3-W

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:	P640456
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-31)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5D-830-U-SL3-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	23382.6 lumens
Efficiency:	N/A
Efficacy:	114.3 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B3 - U0 - G4

Input Watts (W):	204.6
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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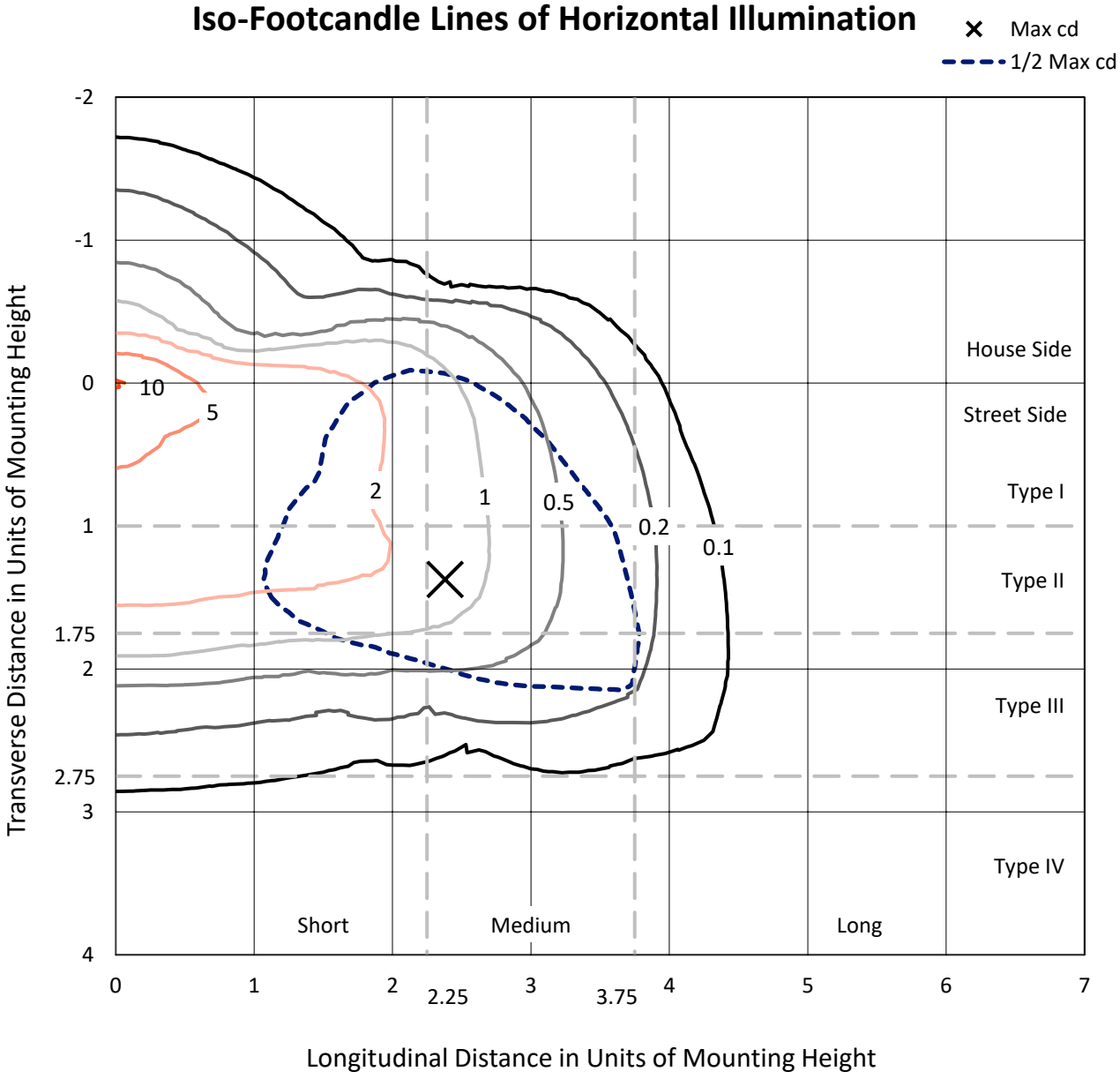
Scaled Data Report

REPORT NUMBER: P640456
CATALOG NUMBER: GWS-SA5D-830-U-SL3-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 10.4 fc
Type III - Medium - N/A

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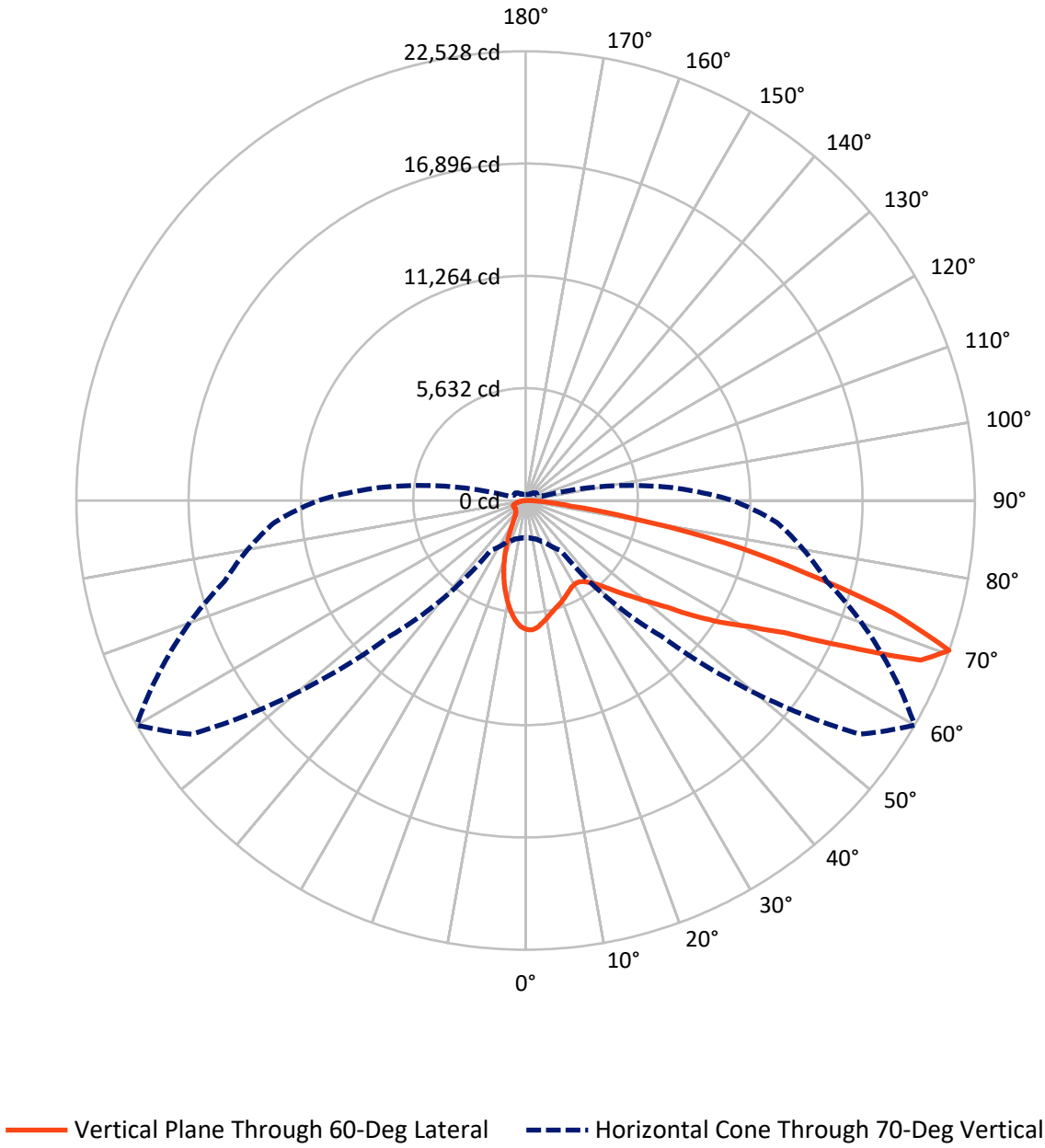
Luminous Intensity Polar Plot



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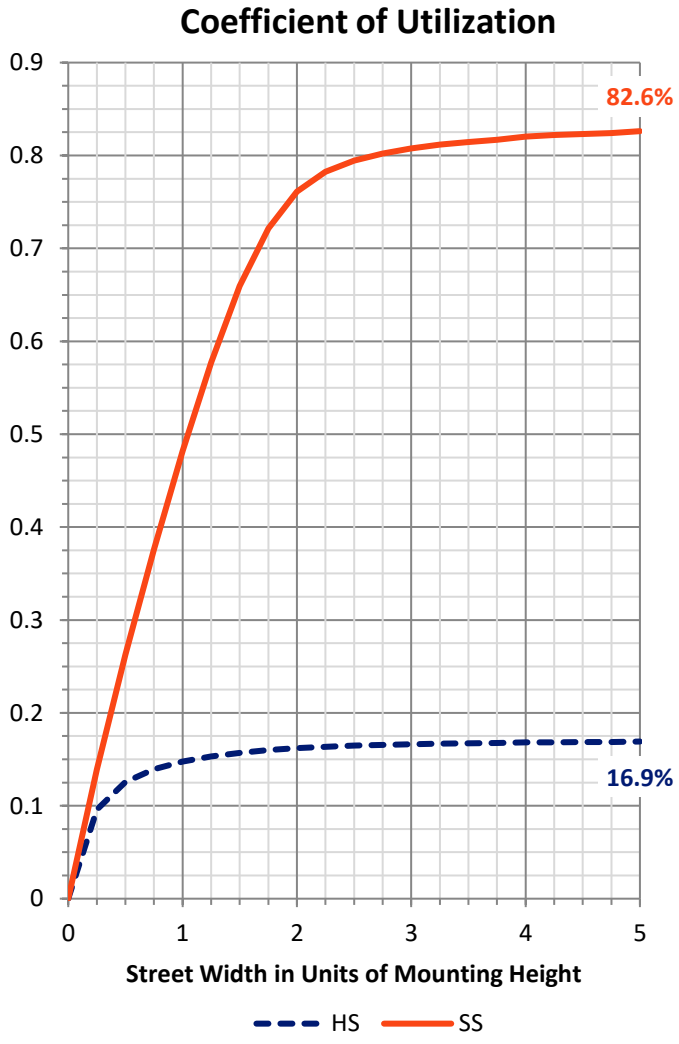
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3999.0	0.0	3999.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	19383.6	0.0	19383.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	23382.6	0.0	23382.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	557.7	2.4
10°-20°	1249.5	5.3
20°-30°	1600.1	6.8
30°-40°	2103.0	9.0
40°-50°	3051.1	13.0
50°-60°	4760.4	20.4
60°-70°	6232.3	26.7
70°-80°	3446.2	14.7
80°-90°	382.4	1.6
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°	23382.6	100.0
0°-180°	23382.6	100.0



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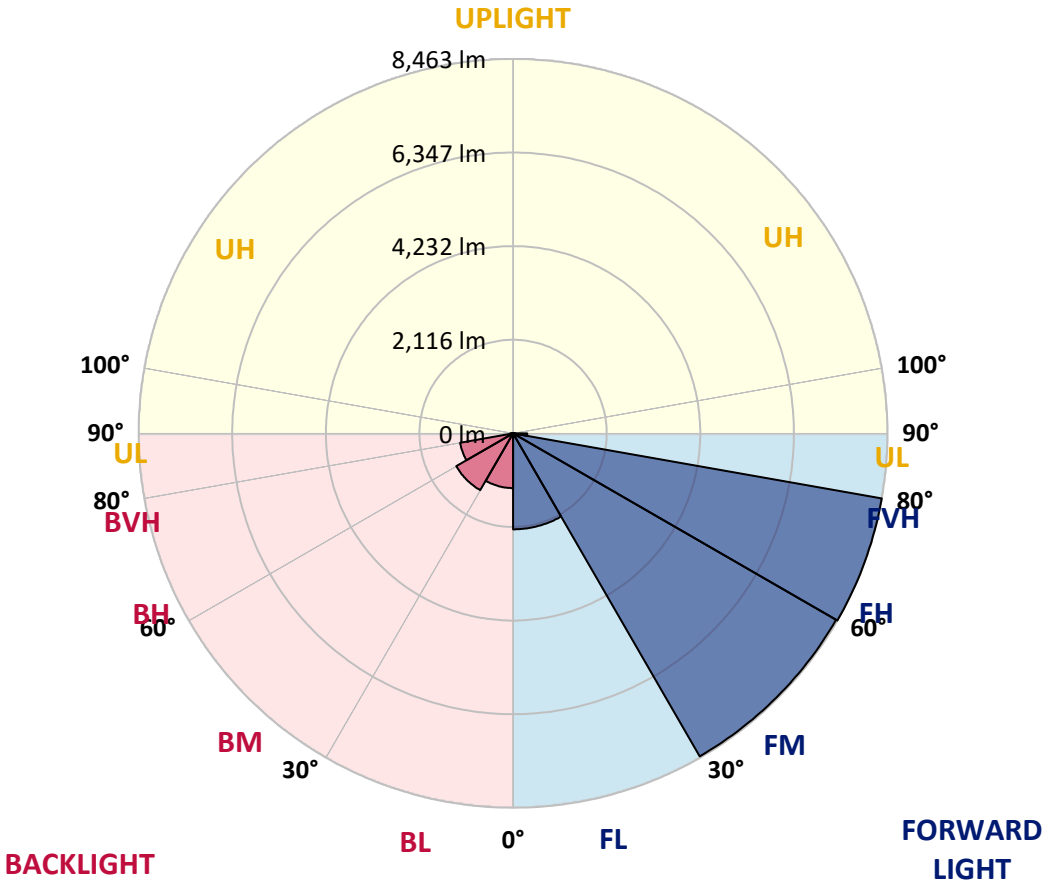
REPORT NUMBER: P640456
CATALOG NUMBER: GWS-SA5D-830-U-SL3-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2170.1	9.3			
FM	(30°-60°)	8431.7	36.1			
FH	(60°-80°)	8463.2	36.2			G4/12000
FVH	(80°-90°)	318.7	1.4			G3/500
BL	(0°-30°)	1237.2	5.3	B3/2500		
BM	(30°-60°)	1482.7	6.3	B2/2500		
BH	(60°-80°)	1215.3	5.2	B3/2500		G3/2500
BVH	(80°-90°)	63.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
Type III Medium



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Scaled Data Report

REPORT NUMBER: P640456
CATALOG NUMBER: GWS-SA5D-830-U-SL3-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3
2.5°	6379.6	6386.4	6405.3	6432.6	6460.0	6473.7	6507.9	6497.6	6490.8	6477.1	6460.0
5°	6097.3	6111.0	6128.1	6181.1	6241.0	6288.9	6365.9	6374.5	6377.9	6384.7	6357.4
7.5°	5738.0	5741.5	5782.5	5852.7	5931.4	6013.5	6141.8	6177.7	6208.5	6242.7	6220.5
10°	5341.1	5349.7	5380.5	5481.4	5616.6	5738.0	5910.8	5970.7	6035.7	6111.0	6080.2
12.5°	5016.1	5017.8	5067.4	5175.2	5322.3	5486.6	5702.1	5774.0	5859.5	5977.6	5950.2
15°	4757.8	4757.8	4803.9	4896.3	5065.7	5259.0	5515.6	5608.0	5724.4	5883.5	5835.6
17.5°	4552.5	4554.2	4583.2	4680.8	4831.3	5045.2	5349.7	5474.6	5602.9	5813.3	5741.5
20°	4444.7	4436.1	4441.3	4501.1	4629.4	4836.4	5183.7	5329.2	5502.0	5765.4	5655.9
22.5°	4439.5	4424.1	4401.9	4407.0	4482.3	4653.4	5005.8	5182.0	5399.3	5726.1	5568.7
25°	4526.8	4509.7	4470.3	4425.9	4419.0	4521.7	4838.2	5038.3	5293.2	5709.0	5484.8
27.5°	4673.9	4661.9	4610.6	4543.9	4473.8	4470.3	4711.6	4920.3	5216.2	5726.1	5425.0
30°	4869.0	4848.4	4815.9	4730.4	4624.3	4514.8	4661.9	4857.0	5164.9	5780.8	5399.3
32.5°	5089.6	5077.7	5046.9	4961.3	4848.4	4673.9	4701.3	4870.7	5164.9	5876.6	5404.4
35°	5324.0	5322.3	5322.3	5265.9	5141.0	4923.7	4857.0	4987.0	5243.6	6030.6	5459.2
37.5°	5551.6	5549.9	5604.6	5625.1	5483.1	5248.8	5122.2	5219.7	5416.4	6258.1	5594.3
40°	5736.3	5743.2	5862.9	5965.6	5886.9	5669.6	5491.7	5541.3	5697.0	6581.5	5830.4
42.5°	5922.8	5941.6	6121.3	6302.6	6333.4	6145.2	5965.6	5994.7	6099.0	7009.2	6182.9
45°	6126.4	6135.0	6386.4	6639.6	6788.5	6677.3	6530.1	6569.5	6593.4	7537.8	6708.1
47.5°	6323.1	6345.4	6670.4	7017.7	7300.0	7289.7	7207.6	7195.6	7200.8	8181.1	7329.1
50°	6591.7	6624.2	7005.8	7424.9	7838.9	8028.8	8052.8	7962.1	7924.5	8896.2	8102.4
52.5°	7101.6	7101.6	7443.7	7856.0	8412.0	8882.5	9043.3	8894.5	8774.7	9652.4	8923.6
55°	7739.7	7767.1	8039.1	8372.7	9077.5	9780.7	10324.7	10160.5	9821.7	10475.3	9784.1
57.5°	8023.7	8057.9	8489.0	9007.4	9948.3	10802.0	11556.5	11498.3	11003.9	11330.7	10677.1
60°	7510.4	7582.3	8175.9	9045.0	10737.0	12449.5	12981.6	12812.2	12105.7	12228.8	11645.5
62.5°	6265.0	6343.7	7002.3	8215.3	10627.5	14230.5	15227.9	14603.4	13481.2	13363.1	12935.4
65°	3738.1	3734.7	4526.8	6135.0	9277.7	14724.9	18782.9	17617.9	15606.0	14919.9	14263.0
67.5°	2376.3	2371.2	2537.1	3250.5	6174.3	13513.7	21068.6	21371.4	18492.1	16064.5	14372.5
70°	1875.0	1873.3	1993.1	2318.1	3053.8	9616.4	20432.2	22527.9	20235.4	15628.2	12654.8
72.5°	1366.9	1370.4	1555.1	1941.8	2355.8	4827.9	16545.2	19275.7	18611.9	13795.9	10273.4
75°	982.0	987.1	1098.3	1486.7	2172.7	2639.8	11002.2	14493.9	14160.3	11058.6	7067.3
77.5°	624.4	631.3	728.8	1041.9	1755.3	2131.7	6670.4	10232.3	9421.4	6230.8	2513.2
80°	381.5	403.8	485.9	776.7	1402.9	1599.6	3334.4	5390.7	4718.4	1709.1	845.1
82.5°	196.7	213.9	292.5	480.7	966.6	1404.6	1887.0	2265.1	1461.0	715.1	449.9
85°	61.6	71.9	102.6	195.0	460.2	870.8	1248.9	1125.7	670.6	337.0	208.7
87.5°	15.4	15.4	17.1	17.1	18.8	39.3	241.2	254.9	177.9	106.1	85.5
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: P640456
CATALOG NUMBER: GWS-SA5D-830-U-SL3-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3	6470.3
2.5°	6425.8	6384.7	6367.6	6365.9	6323.1	6261.5	6220.5	6191.4	6174.3	6170.9	6170.9
5°	6311.2	6258.1	6188.0	6135.0	6020.3	5904.0	5806.5	5751.7	5688.4	5679.9	5678.2
7.5°	6158.9	6081.9	5948.5	5799.6	5599.5	5406.1	5241.9	5130.7	5019.5	4999.0	4992.1
10°	5994.7	5890.3	5662.8	5401.0	5101.6	4812.5	4561.0	4364.3	4234.2	4141.9	4124.8
12.5°	5832.1	5693.6	5360.0	4969.9	4559.3	4164.1	3786.0	3464.4	3231.7	3096.6	3072.6
15°	5679.9	5486.6	5029.8	4531.9	3998.2	3457.5	2922.1	2504.6	2177.9	2061.5	2034.1
17.5°	5541.3	5300.1	4709.8	4078.6	3413.1	2706.5	2097.4	1726.2	1534.6	1476.4	1462.7
20°	5402.7	5108.5	4384.8	3601.2	2792.0	1999.9	1532.9	1358.4	1286.5	1264.3	1257.4
22.5°	5253.9	4898.0	4030.7	3130.8	2164.2	1497.0	1254.0	1177.0	1154.8	1156.5	1154.8
25°	5105.0	4684.2	3659.4	2619.2	1611.6	1214.7	1094.9	1065.8	1071.0	1086.4	1089.8
27.5°	4981.9	4494.3	3295.0	2058.1	1259.2	1045.3	988.8	987.1	1006.0	1026.5	1029.9
30°	4892.9	4324.9	2935.7	1582.5	1036.7	929.0	906.7	917.0	939.2	954.6	959.8
32.5°	4829.6	4179.5	2552.5	1243.8	908.4	846.8	836.6	846.8	860.5	875.9	879.4
35°	4807.4	4073.4	2176.1	1014.5	821.2	787.0	780.1	785.3	792.1	800.7	804.1
37.5°	4857.0	4020.4	1782.7	882.8	768.2	747.6	737.4	733.9	735.6	739.1	740.8
40°	5004.1	4044.3	1461.0	805.8	733.9	715.1	698.0	691.2	689.5	692.9	691.2
42.5°	5257.3	4145.3	1228.4	761.3	706.6	679.2	660.4	653.5	653.5	662.1	662.1
45°	5628.6	4343.7	1060.7	728.8	682.6	648.4	627.9	624.4	631.3	645.0	646.7
47.5°	6172.6	4634.6	959.8	704.9	660.4	621.0	600.5	598.8	612.5	634.7	636.4
50°	6817.6	5053.7	905.0	687.7	645.0	598.8	578.3	580.0	595.4	619.3	624.4
52.5°	7594.3	5625.1	908.4	680.9	636.4	585.1	564.6	561.1	576.5	600.5	605.6
55°	8396.6	6319.7	975.2	682.6	624.4	578.3	550.9	538.9	552.6	569.7	571.4
57.5°	9279.4	7103.3	1141.1	679.2	609.0	571.4	538.9	511.5	520.1	530.3	535.5
60°	10275.1	8025.4	1498.7	686.0	602.2	556.0	515.0	479.0	477.3	484.2	485.9
62.5°	11606.1	9279.4	1900.7	698.0	617.6	537.2	479.0	441.4	434.5	438.0	439.7
65°	12624.0	9878.2	1774.1	687.7	650.1	523.5	444.8	405.5	391.8	388.4	388.4
67.5°	12210.0	9086.1	1235.2	660.4	665.5	525.2	417.4	367.8	350.7	342.2	340.5
70°	*10389.7*	*7380.4*	*858.8*	*633.0*	*648.4*	*521.8*	*388.4*	*337.0*	*314.8*	*302.8*	*301.1*
72.5°	8208.4	5635.4	694.6	578.3	588.5	470.5	345.6	302.8	284.0	268.6	268.6
75°	5283.0	3438.7	580.0	515.0	480.7	366.1	299.4	270.3	251.5	236.1	236.1
77.5°	1777.5	1276.3	449.9	436.3	359.3	275.4	251.5	232.7	217.3	203.6	201.9
80°	722.0	605.6	330.2	330.2	251.5	210.4	196.7	188.2	177.9	160.8	160.8
82.5°	419.1	367.8	231.0	200.2	167.7	145.4	136.9	128.3	128.3	116.3	116.3
85°	201.9	203.6	138.6	123.2	95.8	83.8	80.4	75.3	73.6	66.7	65.0
87.5°	109.5	111.2	70.1	54.7	37.6	32.5	27.4	25.7	24.0	22.2	22.2
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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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

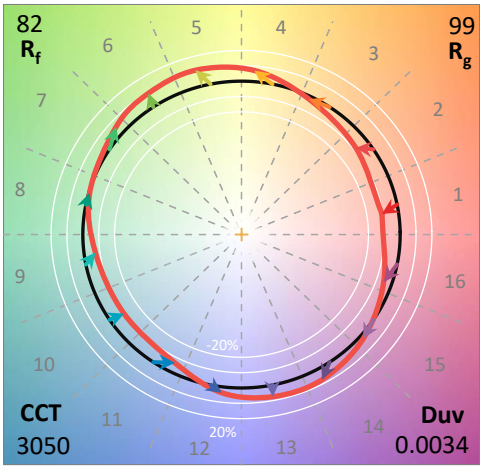
Test Information

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

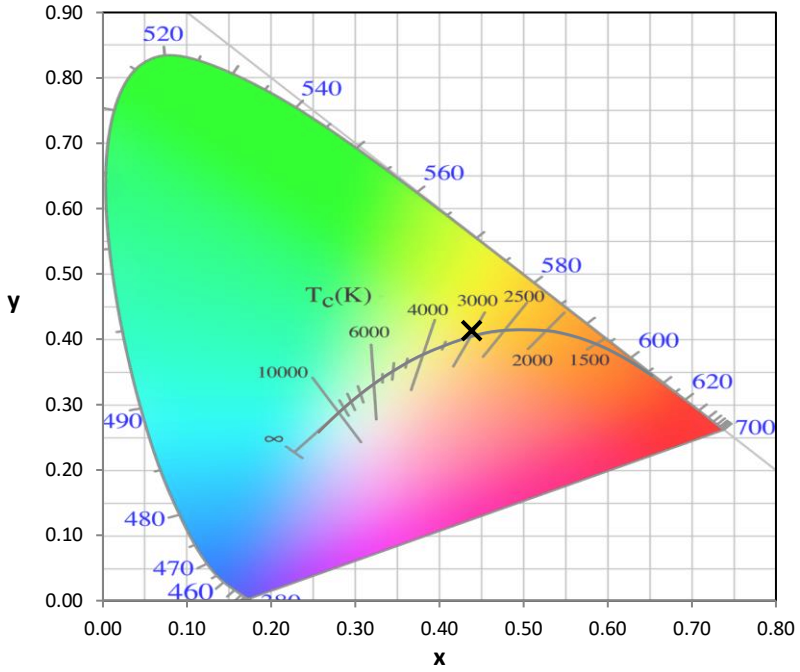
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

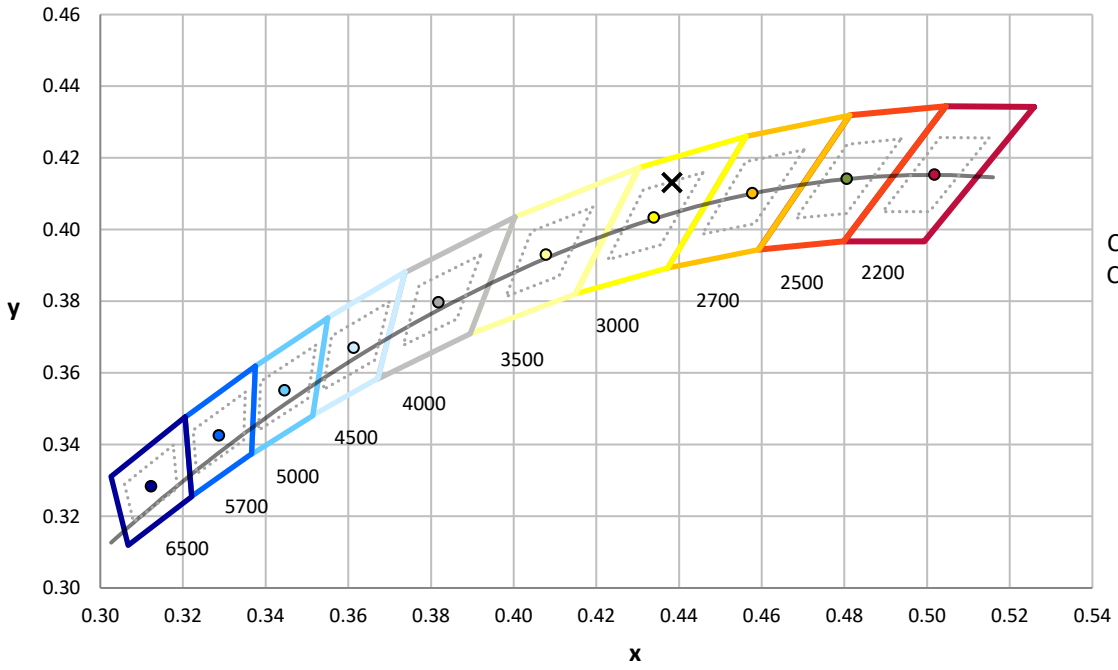
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

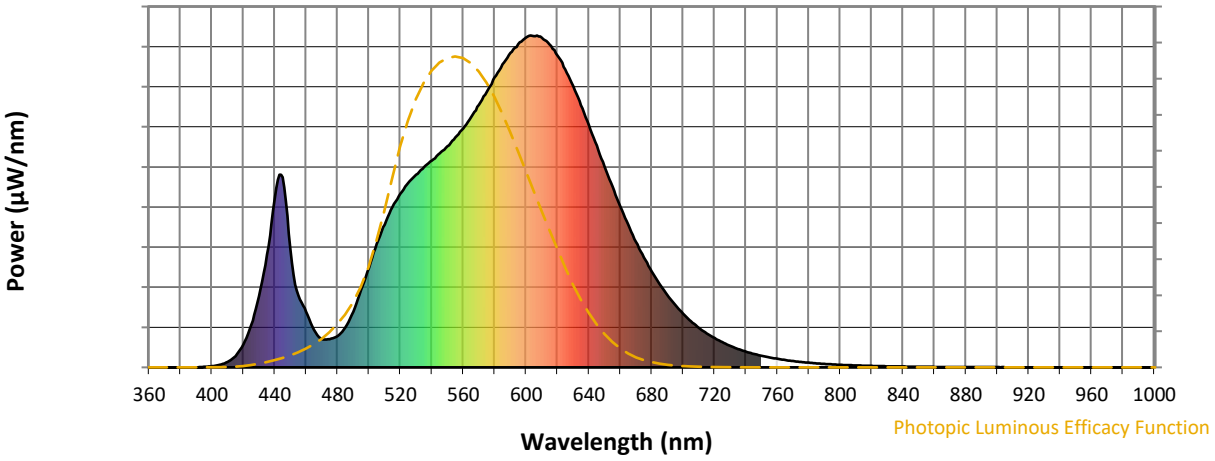


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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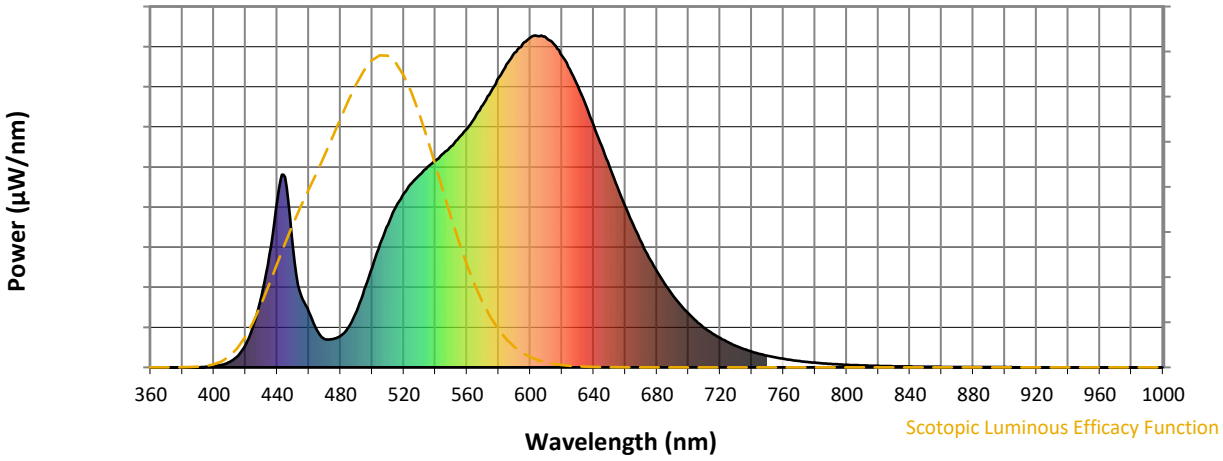
Scotopic Flux vs. Wavelength



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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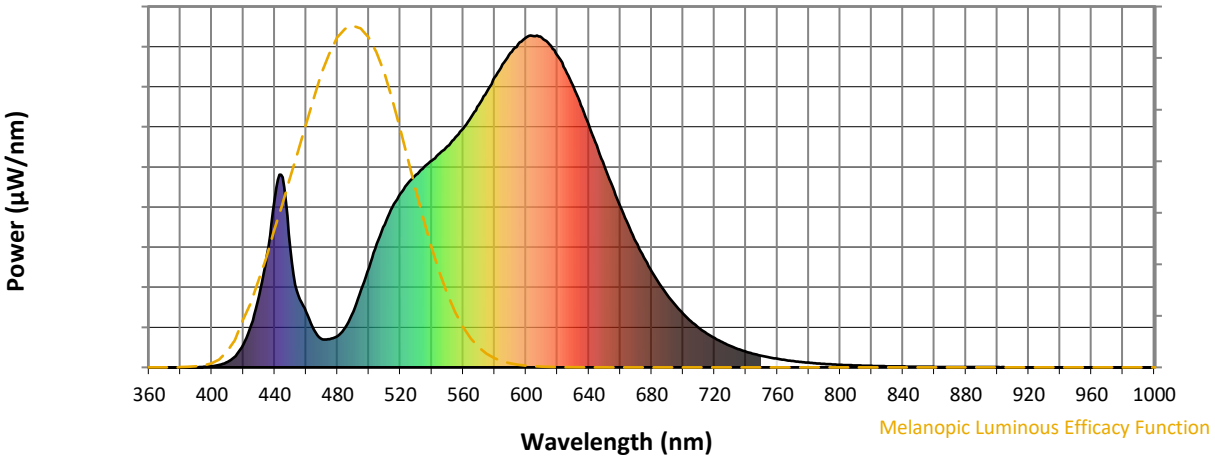
Melanopic Flux vs. Wavelength



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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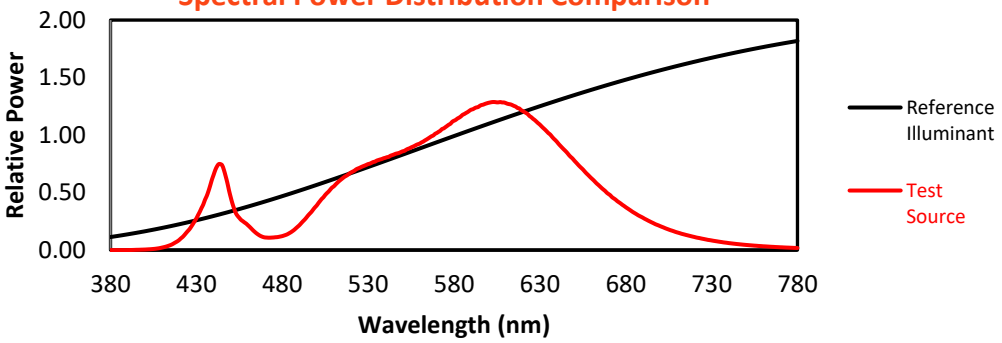
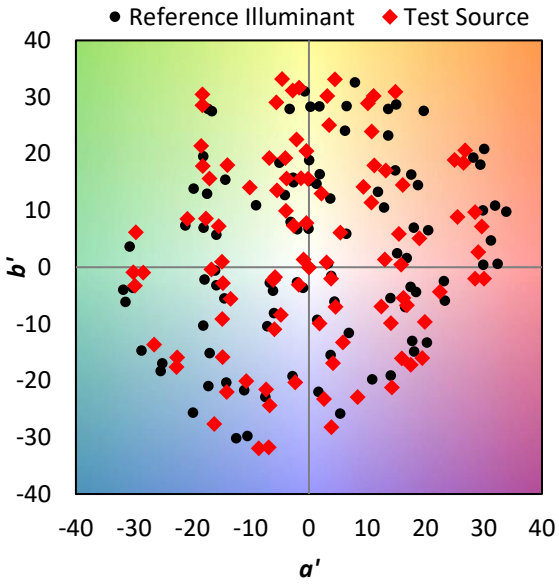
Summary

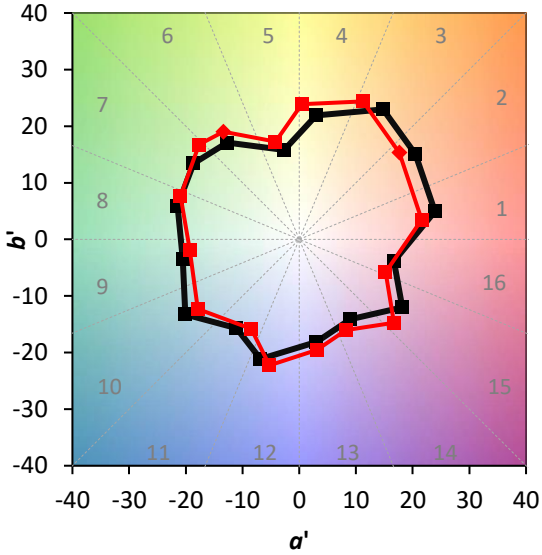
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

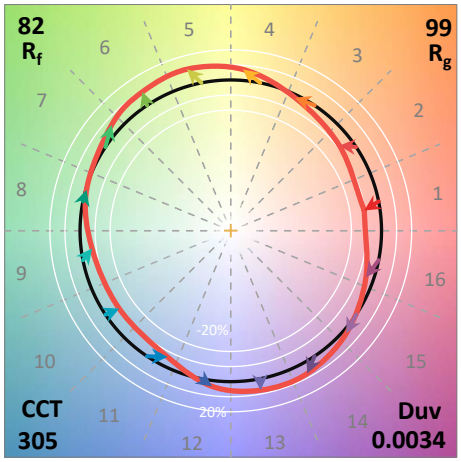
Spectral Power Distribution Comparison

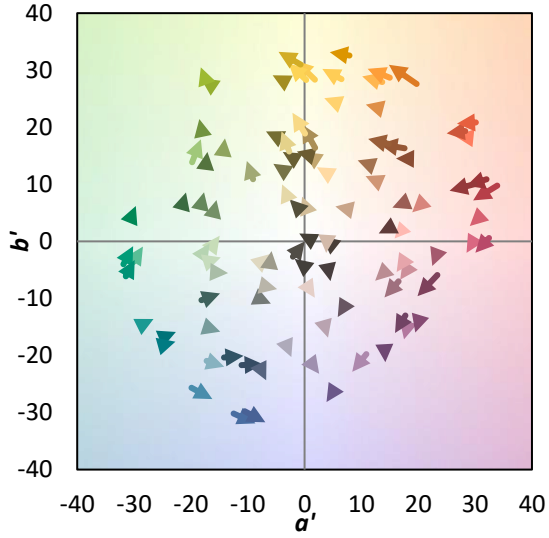


Color Vector Graphics









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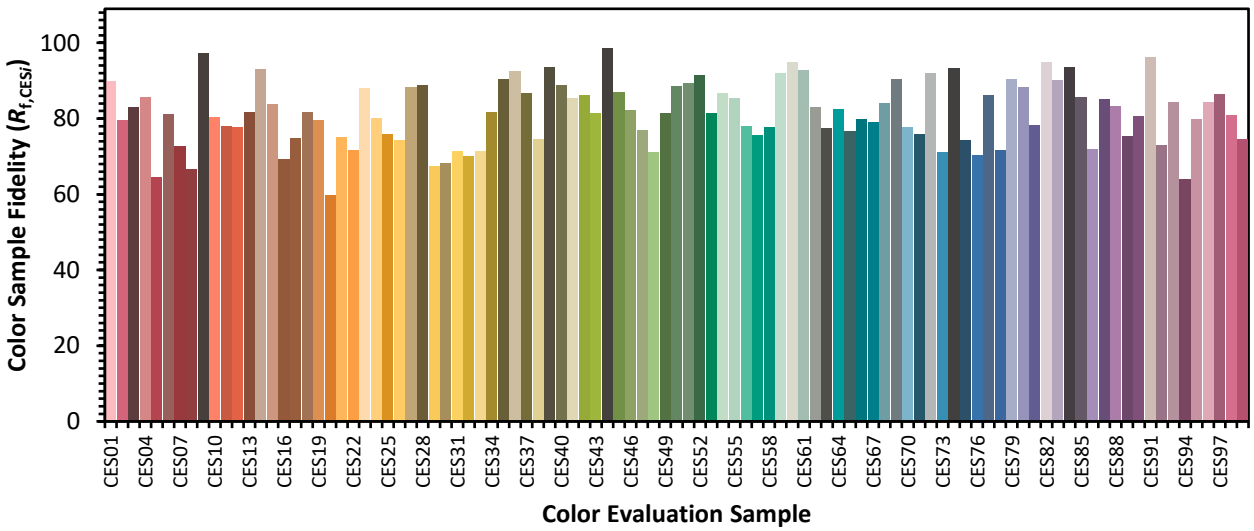
Individual Sample Fidelity Index ($R_{f,i}$)

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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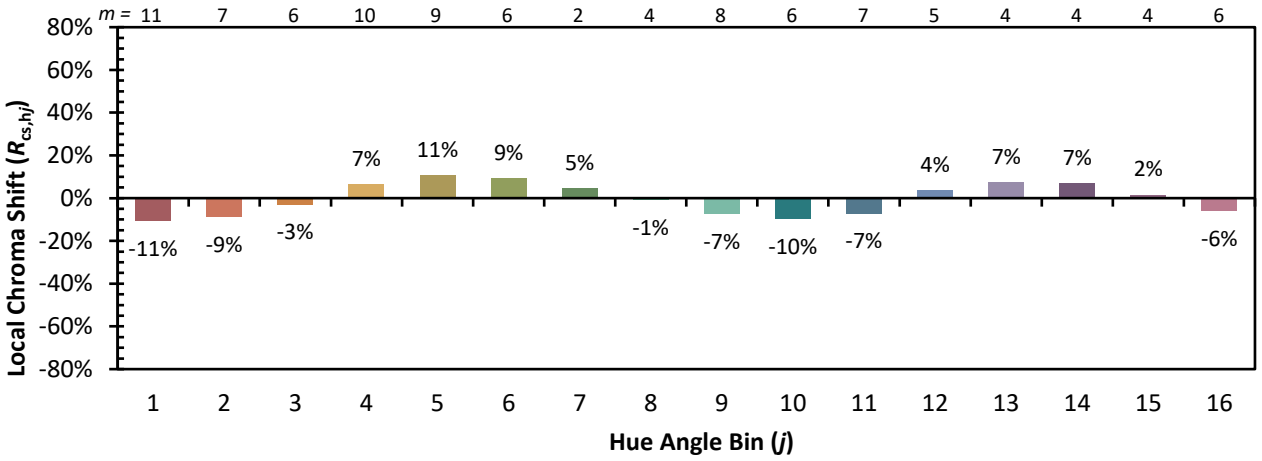
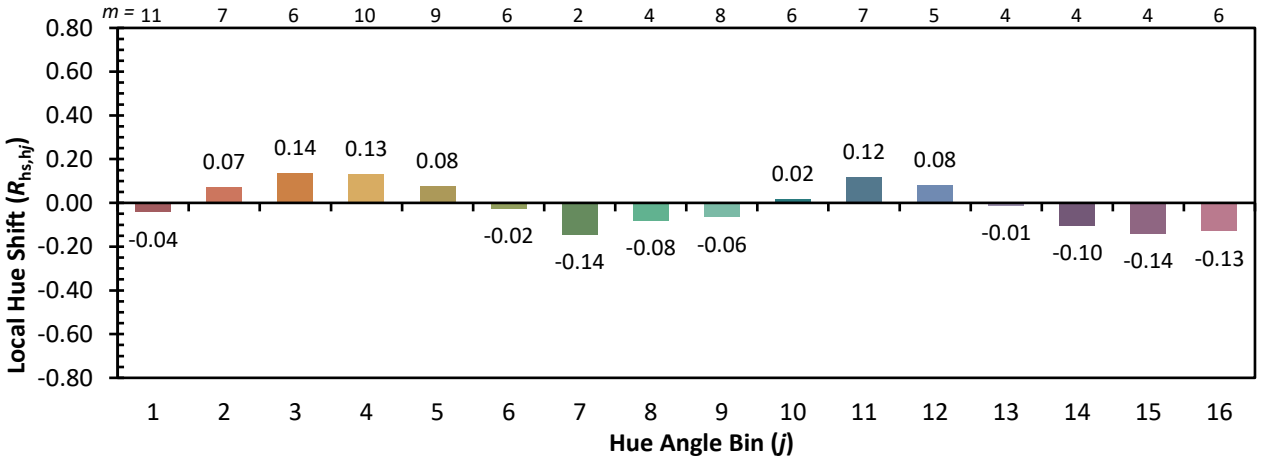
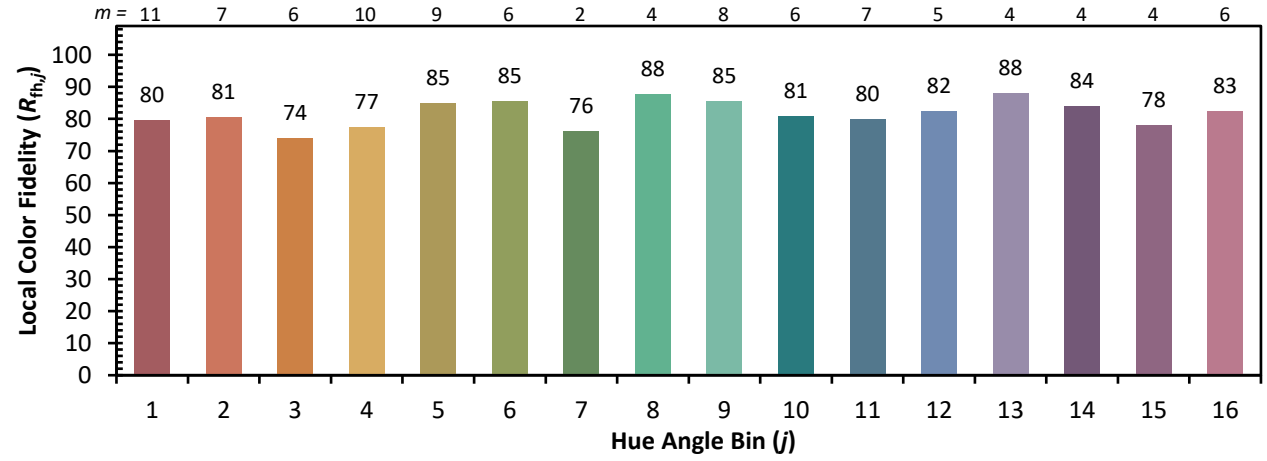
Color Rendition by Hue-Angle Bin







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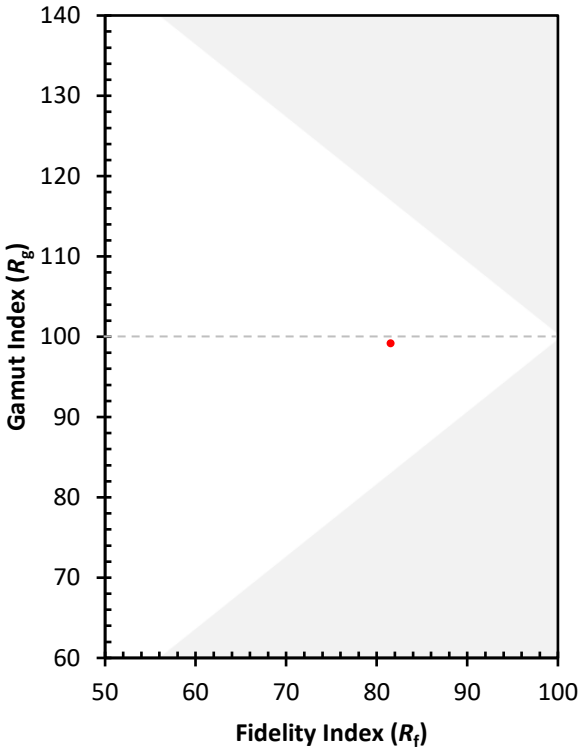
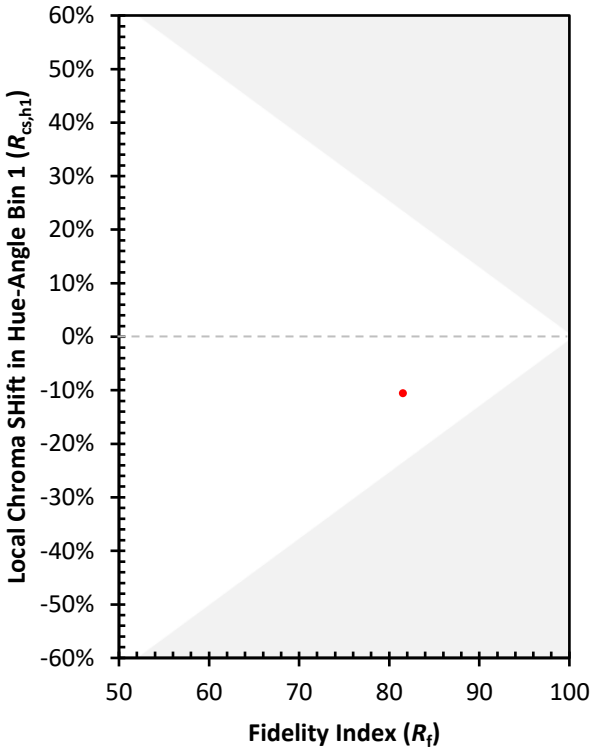
Measure Comparisons





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