Signify Classified - Internal

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: P640980

Luminaire Tested: GWS-SA5E-830-U-T4FT-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:	P640980
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-54)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5E-830-U-T4FT-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	28805.3 lumens
Efficiency:	N/A
Efficacy:	106.8 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B3 - 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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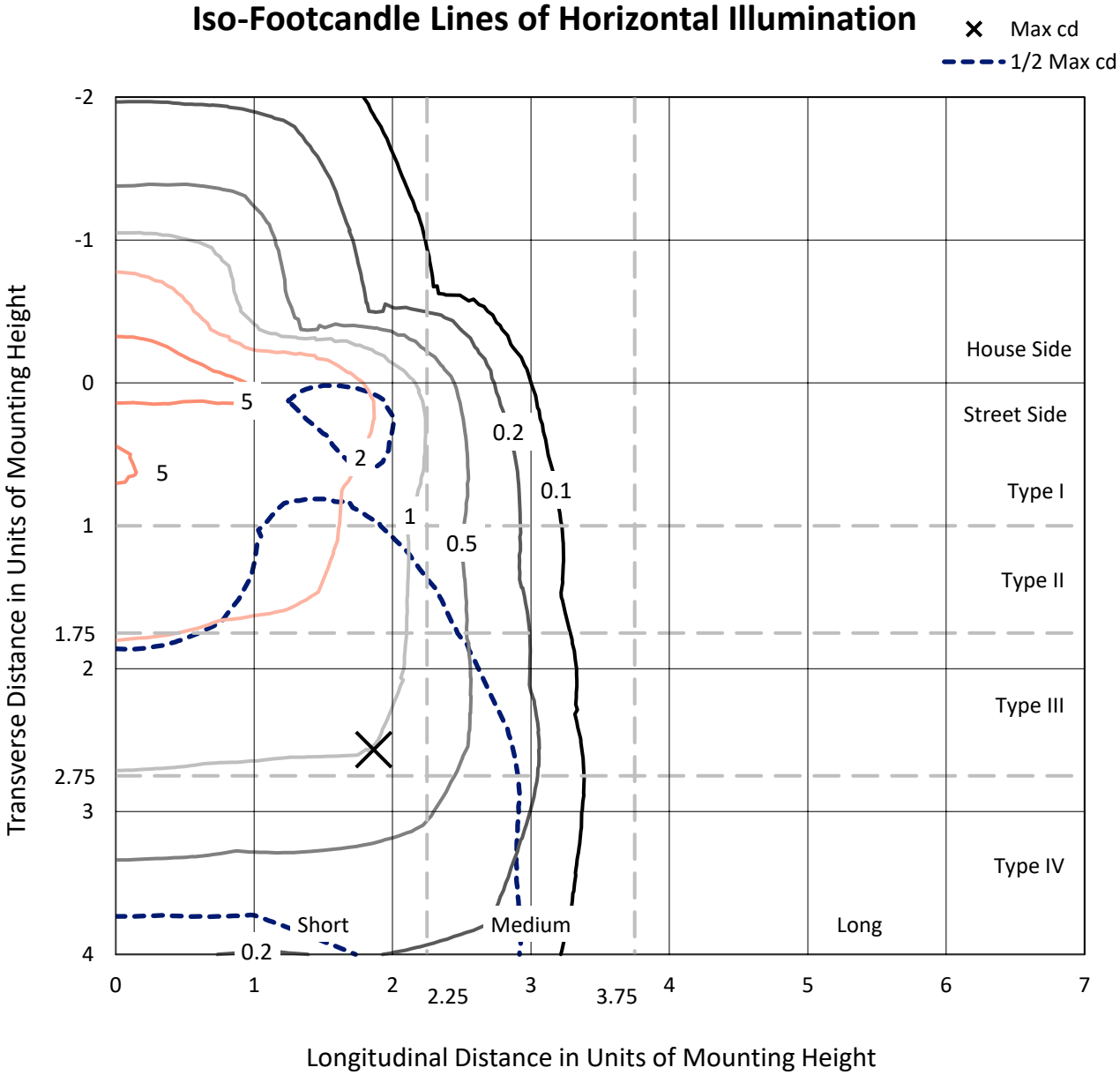
REPORT NUMBER: P640980
CATALOG NUMBER: GWS-SA5E-830-U-T4FT-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
Type IV - Short - N/A

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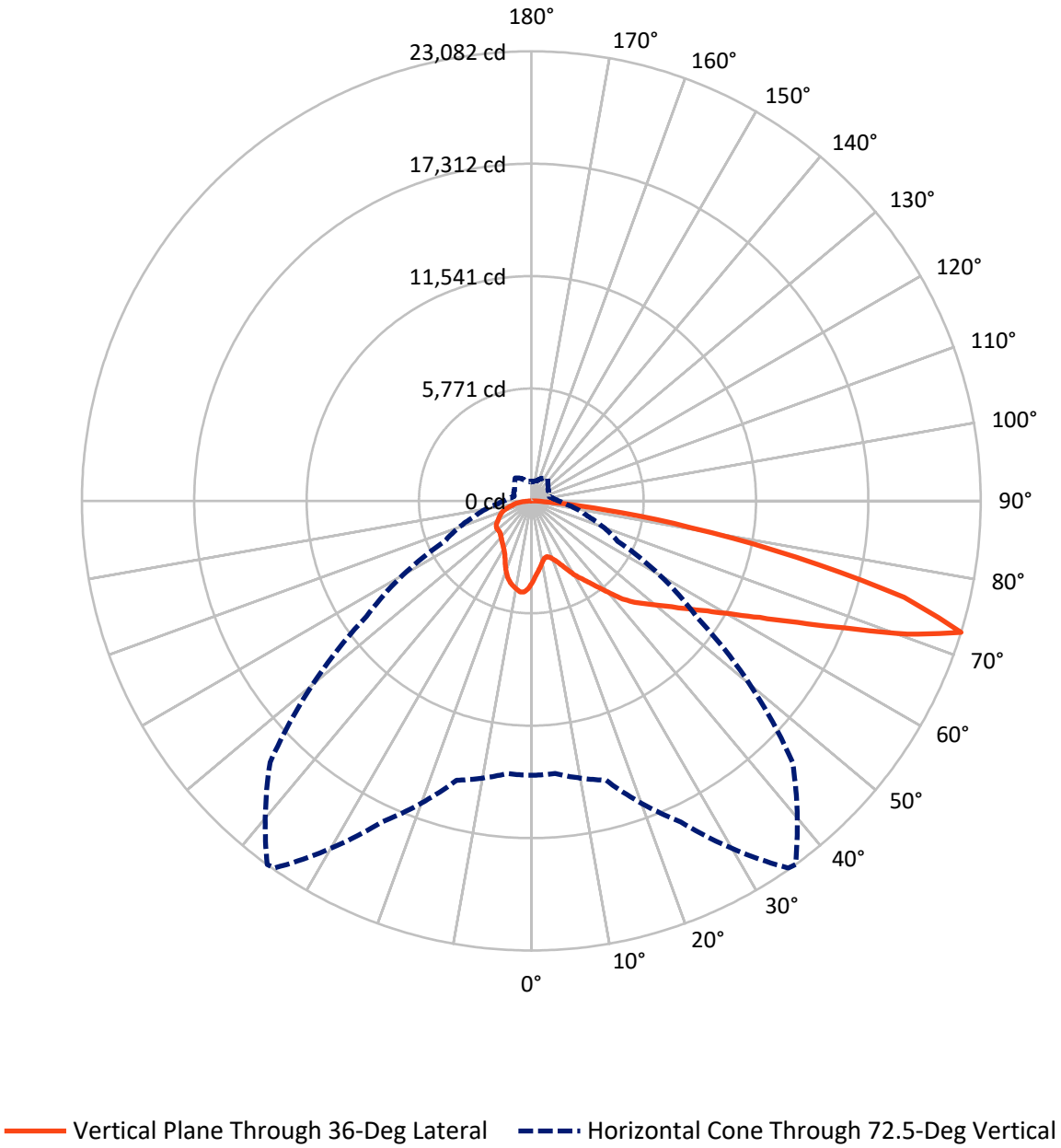
Luminous Intensity Polar Plot



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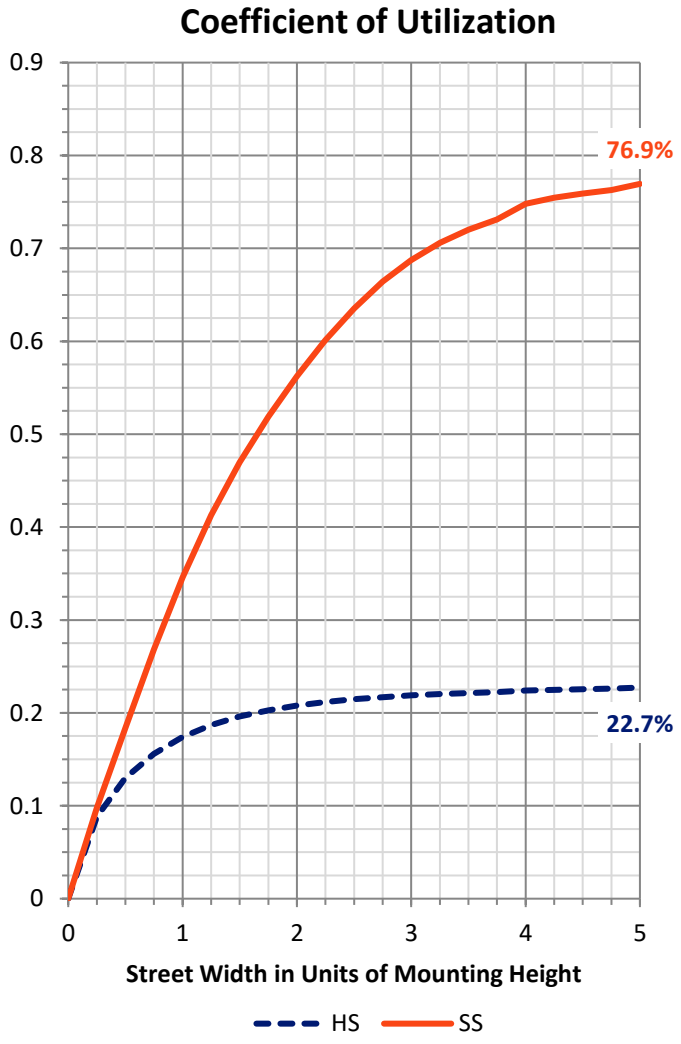
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6640.9	0.0	6640.9
	% Fixture	23.1	0.0	23.1
Street Side	Lumens	22164.4	0.0	22164.4
	% Fixture	76.9	0.0	76.9
Total	Lumens	28805.3	0.0	28805.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	394.1	1.4
10°-20°	1111.8	3.9
20°-30°	1841.3	6.4
30°-40°	2757.5	9.6
40°-50°	4022.9	14.0
50°-60°	5725.9	19.9
60°-70°	7234.2	25.1
70°-80°	5155.0	17.9
80°-90°	562.7	2.0
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°	28805.3	100.0
0°-180°	28805.3	100.0



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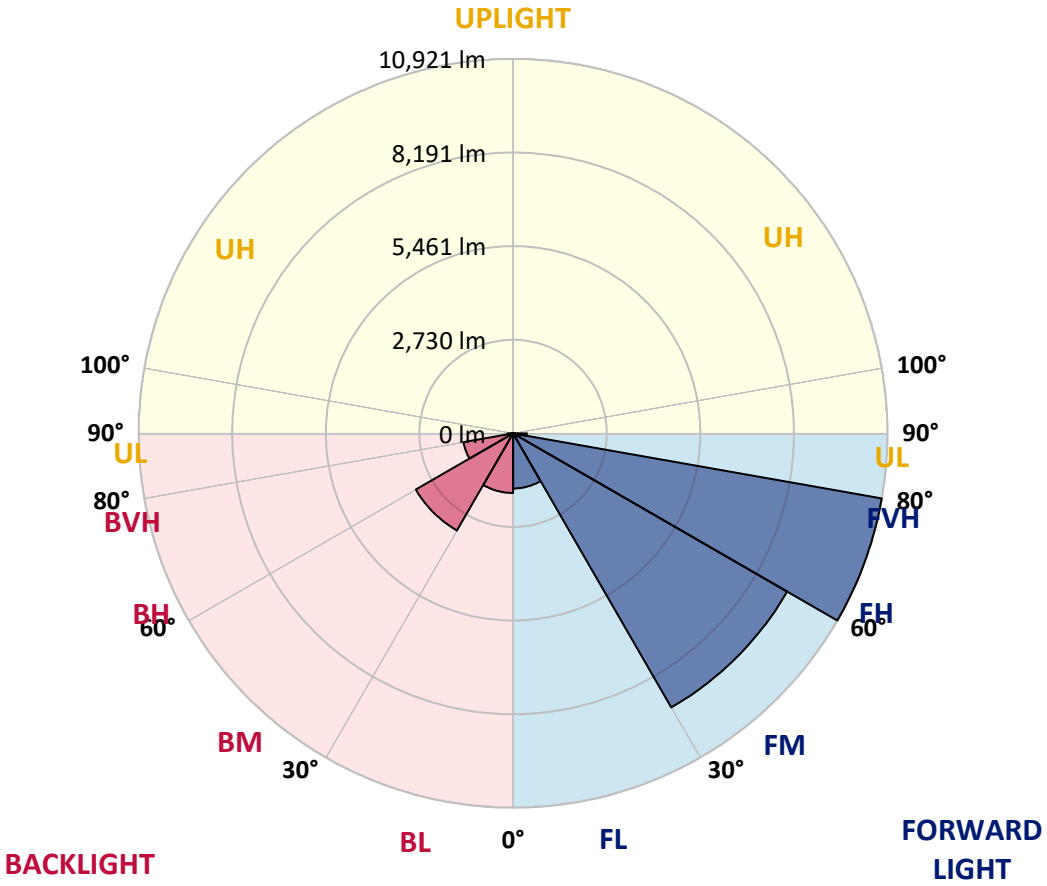
REPORT NUMBER: P640980
CATALOG NUMBER: GWS-SA5E-830-U-T4FT-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1608.1	5.6			
FM	(30°-60°)	9231.4	32.0			
FH	(60°-80°)	10921.0	37.9			G4/12000
FVH	(80°-90°)	403.9	1.4			G3/500
BL	(0°-30°)	1739.0	6.0	B3/2500		
BM	(30°-60°)	3274.9	11.4	B3/5000		
BH	(60°-80°)	1468.1	5.1	B3/2500		G3/2500
BVH	(80°-90°)	158.8	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	4215.8	4215.8	4215.8	4215.8	4215.8	*4215.8*	4215.8	4215.8	4215.8	4215.8	4215.8
2.5°	3845.9	3839.5	3826.7	3865.2	3903.7	*3899.4*	3952.8	4004.1	4059.7	4117.4	4194.4
5°	3538.1	3533.8	3523.1	3580.9	3638.6	*3636.4*	3724.1	3807.5	3920.8	4044.8	4198.7
7.5°	3230.2	3219.6	3234.5	3307.2	3388.4	*3397.0*	3516.7	3653.5	3818.1	4004.1	4222.2
10°	2958.7	2956.6	2963.0	3044.3	3166.1	*3174.7*	3328.6	3518.9	3736.9	3984.9	4275.6
12.5°	2888.2	2883.9	2866.8	2907.4	2999.4	*3012.2*	3181.1	3414.1	3681.3	3995.6	4348.3
15°	3003.6	2993.0	2933.1	2913.9	2958.7	*2969.4*	3112.7	3352.1	3649.3	4014.8	4440.3
17.5°	3202.5	3196.0	3082.7	3003.6	3033.6	*3042.1*	3149.0	3341.4	3640.7	4053.3	4553.6
20°	3493.2	3465.4	3288.0	3168.3	3168.3	*3181.1*	3245.2	3388.4	3651.4	4100.3	4681.8
22.5°	3878.0	3822.4	3572.3	3409.8	3367.1	*3384.2*	3412.0	3506.0	3696.3	4179.4	4842.2
25°	4309.8	4258.5	3961.4	3732.6	3672.8	*3679.2*	3655.7	3672.8	3794.6	4288.5	5041.0
27.5°	4769.5	4735.3	4418.9	4128.1	4034.1	*4034.1*	3950.7	3910.1	3931.5	4412.5	5263.3
30°	5179.9	5132.9	4865.7	4547.1	4423.2	*4423.2*	4265.0	4177.3	4126.0	4564.2	5560.5
32.5°	5395.9	5368.1	5190.6	4946.9	4795.1	*4771.6*	4634.8	4532.2	4412.5	4788.7	5962.4
35°	5678.1	5671.6	5564.8	5374.5	5182.1	*5147.9*	5053.8	4972.6	4765.2	5068.8	6496.8
37.5°	6032.9	6022.2	6005.1	5891.8	5661.0	*5654.5*	5571.2	5472.8	5203.5	5472.8	7144.6
40°	6430.6	6411.3	6389.9	6387.8	6248.9	*6225.3*	6218.9	6107.8	5731.5	5960.2	7820.2
42.5°	6977.9	6911.6	6710.6	6800.4	6903.0	*6881.6*	6962.9	6796.1	6389.9	6539.6	8459.4
45°	7651.3	7488.8	7091.2	7116.8	7375.5	*7418.2*	7700.4	7659.8	7114.7	7208.7	9132.8
47.5°	8055.3	7914.2	7544.4	7523.0	7845.8	*7899.3*	8512.8	8589.8	7895.0	8014.7	9964.4
50°	8386.7	8288.3	7984.8	8014.7	8356.7	*8410.2*	9318.8	9483.4	8630.4	8839.9	10930.7
52.5°	8786.4	8645.4	8410.2	8551.3	8970.3	*9034.4*	10214.5	10392.0	9293.1	9746.3	11931.2
55°	9010.9	8953.2	8957.5	9173.4	9699.3	*9786.9*	11153.0	11123.1	9900.3	10522.4	12683.7
57.5°	9528.3	9506.9	9703.6	9784.8	10550.2	*10663.5*	12091.5	11835.0	10451.8	11123.1	13045.0
60°	10441.1	10387.7	10558.7	10682.7	11602.0	*11762.3*	13139.1	12531.9	10825.9	11569.9	12923.1
62.5°	11723.8	11657.5	11664.0	11860.6	13010.8	*13179.7*	14304.2	13113.4	10941.4	11638.3	12151.4
65°	13318.6	13222.4	13113.4	13380.6	14881.4	*15022.5*	15571.9	13536.7	10665.6	10979.9	10539.5
67.5°	15001.1	14922.0	14793.7	15353.8	17303.5	*17389.0*	16993.5	13500.3	9791.2	9218.3	7392.6
70°	15099.4	15118.7	15725.8	17752.5	20465.4	*20486.7*	18338.2	12769.2	7929.2	5975.2	3683.5
72.5°	*14086.1*	*14054.0*	*14845.0*	*18190.7*	*23009.4*	*23082.1*	*18973.2*	*10344.9*	*4899.9*	*2980.1*	*1727.4*
75°	11441.6	11497.2	12328.8	15916.1	19721.4	*19785.5*	15467.1	6099.2	2328.1	1458.0	1105.3
77.5°	4925.5	5235.5	6875.2	11212.9	14124.6	*13925.8*	7971.9	2471.3	1242.1	1039.0	846.6
80°	1421.7	1543.5	2449.9	5331.7	8463.6	*8314.0*	3155.4	925.7	865.8	780.3	607.1
82.5°	459.6	508.8	897.9	2122.9	3792.5	*3788.2*	1197.2	547.3	566.5	530.2	391.2
85°	128.3	147.5	275.8	643.5	1173.7	*1150.1*	346.3	258.7	301.4	305.7	194.5
87.5°	0.0	0.0	2.1	4.3	4.3	*4.3*	8.6	38.5	87.7	111.2	79.1
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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REPORT NUMBER: P640980
CATALOG NUMBER: GWS-SA5E-830-U-T4FT-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4215.8	4215.8	4215.8	4215.8	4215.8	4215.8	4215.8	4215.8	4215.8	4215.8	4215.8
2.5°	4241.4	4235.0	4322.7	4391.1	4455.2	4498.0	4510.8	4519.4	4536.5	4545.0	4536.5
5°	4271.4	4303.4	4448.8	4555.7	4641.2	4692.5	4694.7	4690.4	4703.2	4692.5	4686.1
7.5°	4335.5	4397.5	4581.4	4694.7	4750.2	4752.4	4701.1	4641.2	4611.3	4585.6	4577.1
10°	4421.0	4512.9	4713.9	4788.7	4771.6	4692.5	4579.2	4485.2	4431.7	4393.2	4384.7
12.5°	4538.6	4641.2	4831.5	4829.3	4722.4	4581.4	4448.8	4335.5	4258.5	4213.6	4198.7
15°	4649.8	4780.2	4917.0	4816.5	4647.6	4476.6	4305.6	4153.8	4051.2	3980.6	3967.8
17.5°	4786.6	4925.5	4979.0	4775.9	4553.6	4333.4	4104.6	3905.8	3766.8	3683.5	3677.1
20°	4944.8	5068.8	5008.9	4705.3	4431.7	4143.1	3833.1	3610.8	3461.1	3379.9	3386.3
22.5°	5128.6	5218.4	5017.5	4609.1	4262.8	3873.7	3527.4	3313.6	3213.1	3170.4	3172.5
25°	5325.3	5383.0	5002.5	4478.7	4004.1	3544.5	3213.1	3114.8	3106.3	3095.6	3099.8
27.5°	5558.3	5545.5	4957.6	4294.9	3655.7	3161.8	2993.0	3018.6	3052.8	3048.5	3052.8
30°	5870.5	5748.6	4899.9	4040.5	3240.9	2841.2	2862.5	2935.2	2980.1	2984.4	2997.2
32.5°	6227.5	5973.1	4808.0	3694.2	2845.4	2661.6	2740.7	2828.3	2881.8	2892.5	2909.6
35°	6652.9	6229.6	4645.5	3262.3	2561.1	2554.7	2627.4	2687.2	2745.0	2749.2	2749.2
37.5°	7142.5	6486.2	4386.8	2785.6	2385.8	2462.8	2531.2	2544.0	2559.0	2546.1	2552.6
40°	7591.4	6734.1	4019.1	2351.6	2242.6	2381.5	2439.3	2396.5	2349.5	2317.4	2323.8
42.5°	7967.7	6903.0	3531.7	2048.0	2097.2	2308.8	2353.7	2266.1	2174.2	2114.3	2122.9
45°	8391.0	7059.1	2958.7	1842.8	1973.2	2257.5	2287.5	2174.2	2056.6	1966.8	1954.0
47.5°	8974.6	7377.6	2449.9	1699.6	1885.6	2229.7	2278.9	2125.0	1971.1	1836.4	1821.4
50°	9695.0	7828.7	2024.5	1605.5	1844.9	2214.8	2276.8	2071.5	1887.7	1729.5	1718.8
52.5°	10481.7	8269.1	1710.3	1532.8	1804.3	2169.9	2266.1	2011.7	1800.0	1629.0	1616.2
55°	11005.5	8442.3	1498.6	1464.4	1738.0	2099.3	2223.3	1954.0	1667.5	1511.4	1492.2
57.5°	11159.4	8219.9	1351.1	1402.4	1652.5	2001.0	2142.1	1832.1	1586.3	1462.3	1447.3
60°	10894.3	7659.8	1259.2	1351.1	1558.5	1874.9	2001.0	1761.6	1522.1	1411.0	1400.3
62.5°	10146.1	6796.1	1188.6	1297.7	1462.3	1742.3	1911.2	1676.1	1451.6	1363.9	1349.0
65°	8641.1	5573.3	1130.9	1242.1	1370.3	1616.2	1812.9	1590.5	1374.6	1308.3	1291.2
67.5°	6043.6	3914.4	1068.9	1175.8	1278.4	1494.3	1710.3	1511.4	1295.5	1246.4	1229.2
70°	2954.5	2075.8	994.1	1098.8	1180.1	1370.3	1607.6	1415.2	1190.8	1163.0	1139.5
72.5°	*1406.7*	*1160.8*	*906.4*	*994.1*	*1045.4*	*1205.7*	*1436.6*	*1276.3*	*1066.8*	*1006.9*	*966.3*
75°	942.8	825.2	791.0	870.1	882.9	1011.2	1231.4	1101.0	940.6	872.2	838.0
77.5°	714.0	630.7	664.9	735.4	709.8	831.6	1013.3	981.3	848.7	786.7	769.6
80°	502.4	459.6	528.0	570.8	551.6	707.6	912.8	840.2	699.1	630.7	617.8
82.5°	316.4	307.8	389.1	395.5	401.9	560.1	750.4	660.6	543.0	446.8	414.7
85°	158.2	175.3	233.0	233.0	230.9	288.6	427.6	372.0	292.9	233.0	226.6
87.5°	53.4	74.8	100.5	81.2	62.0	49.2	55.6	68.4	72.7	70.5	70.5
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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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

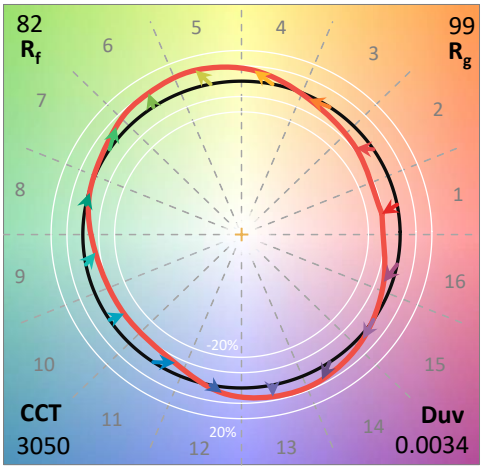
Test Information

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

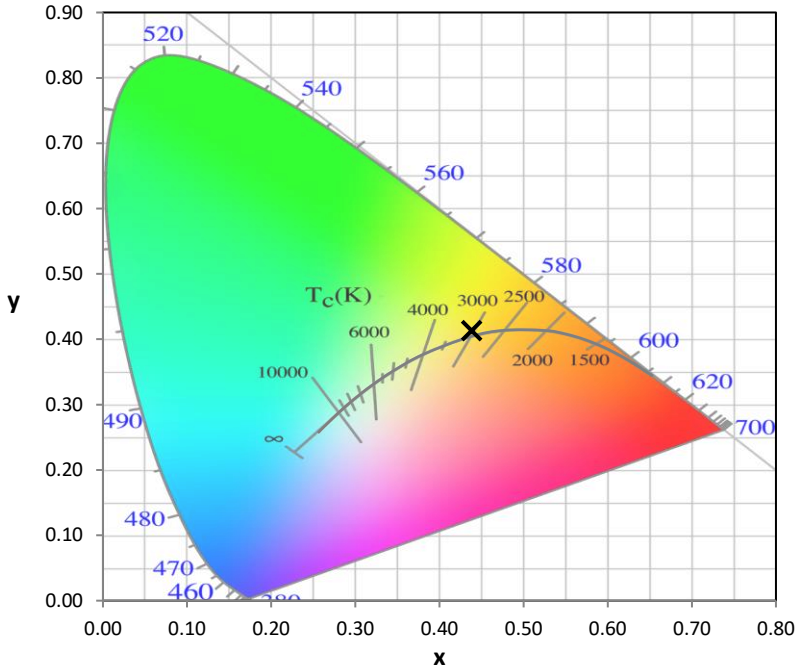
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

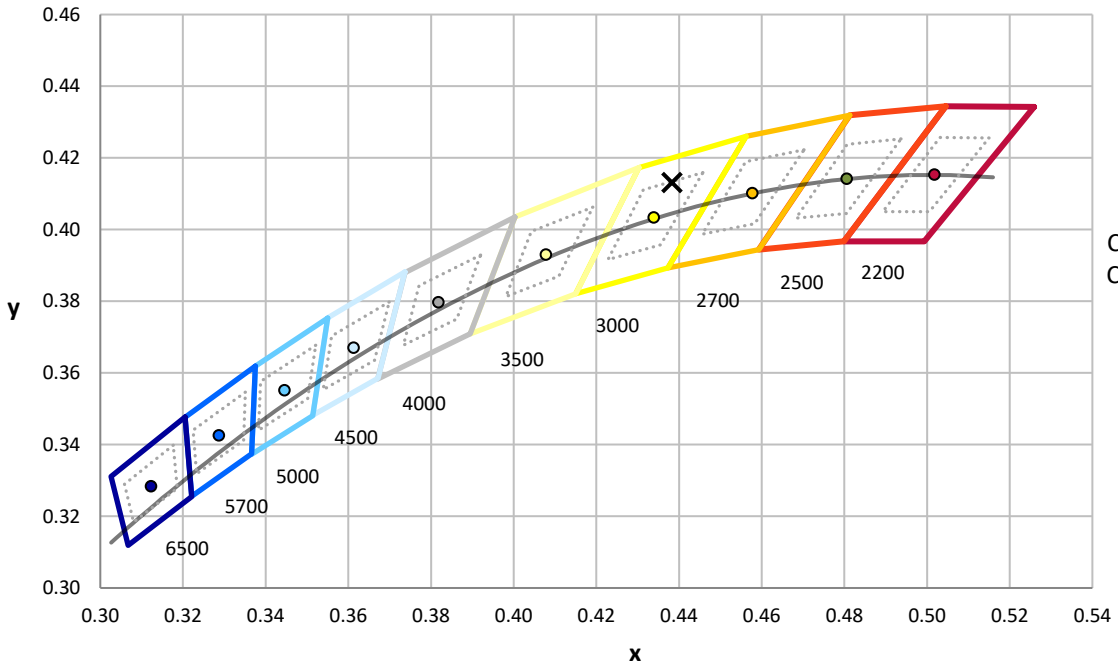
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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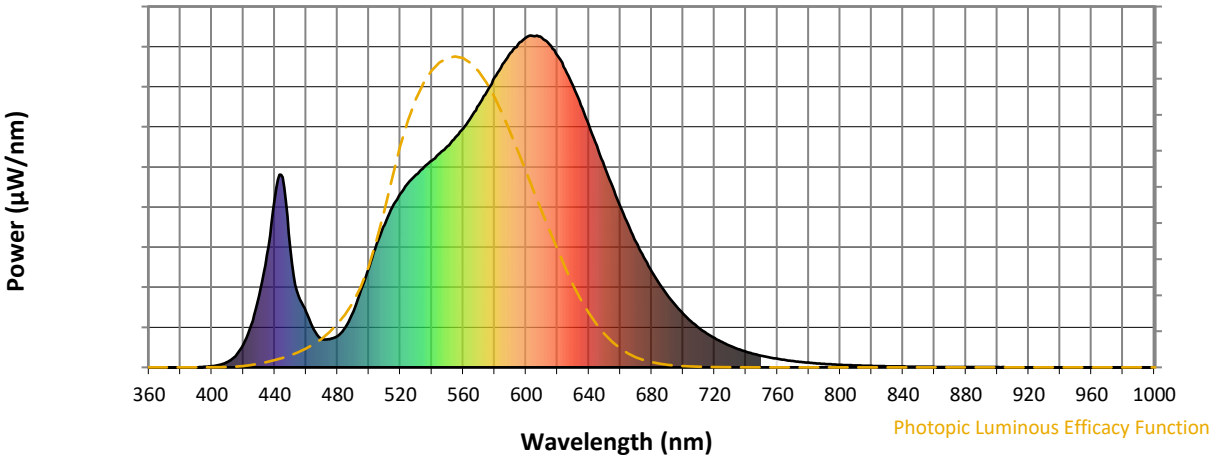
Photopic Flux vs. Wavelength



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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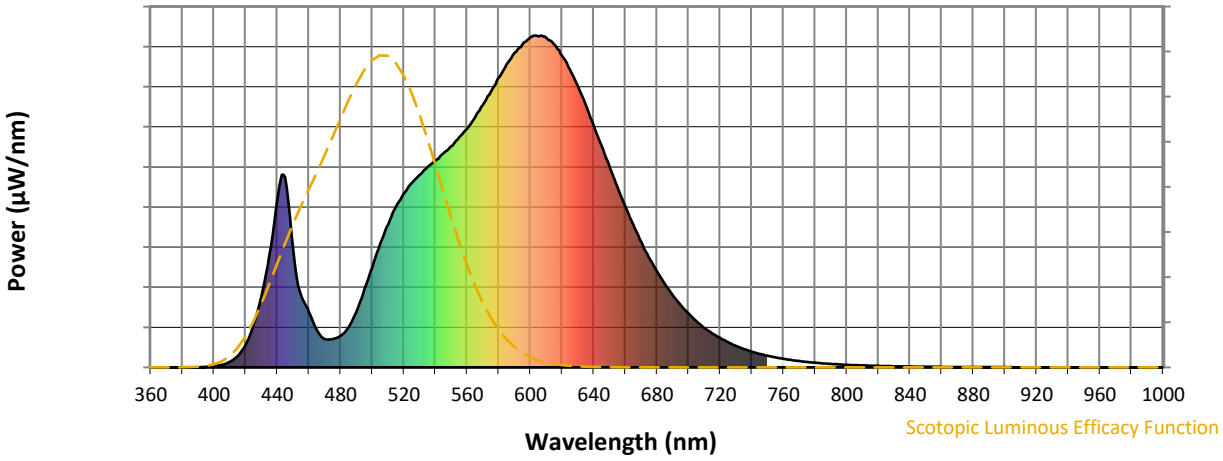
Scotopic Flux vs. Wavelength



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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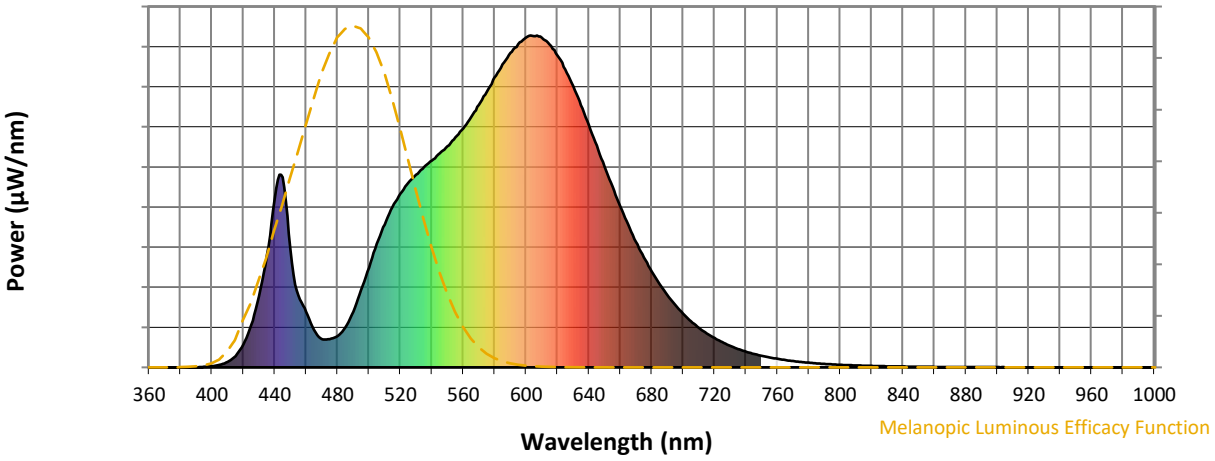
Melanopic Flux vs. Wavelength



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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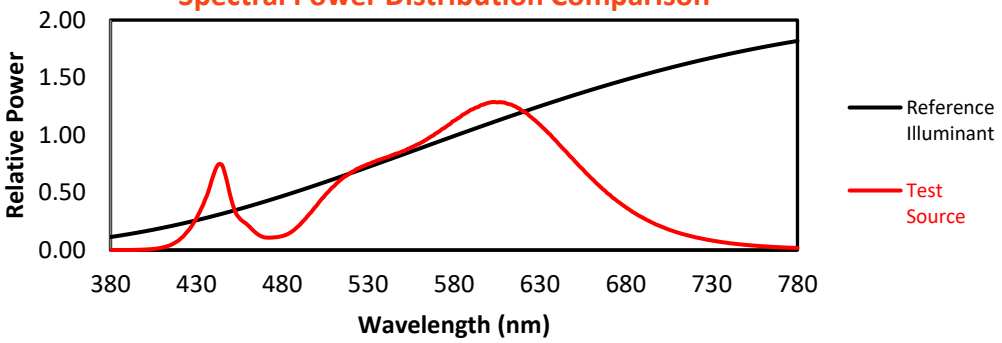
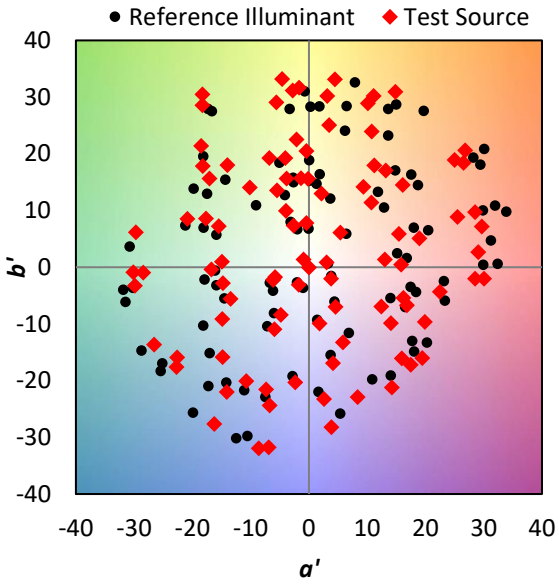
Summary

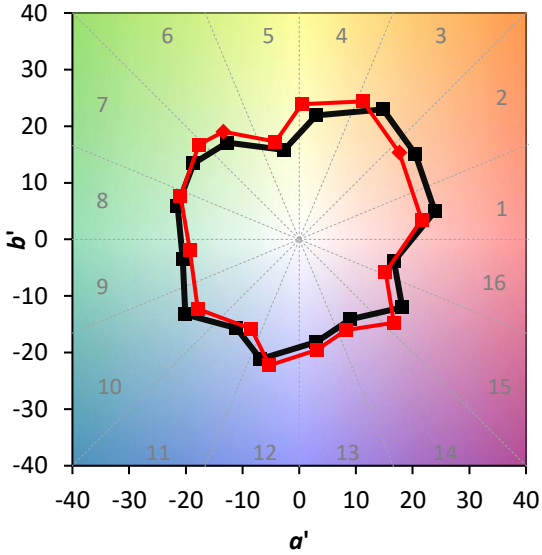
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

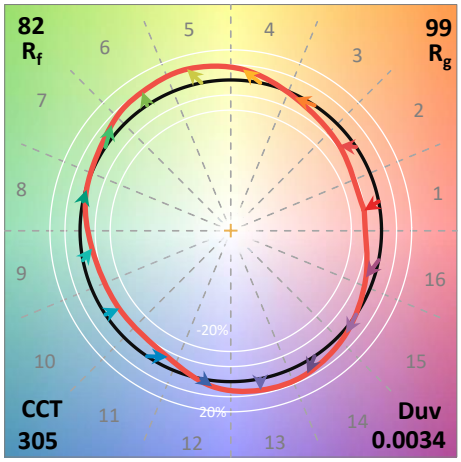
Spectral Power Distribution Comparison

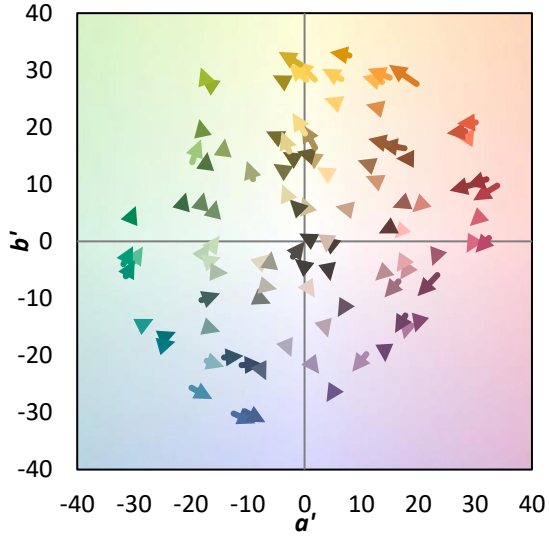


Color Vector Graphics









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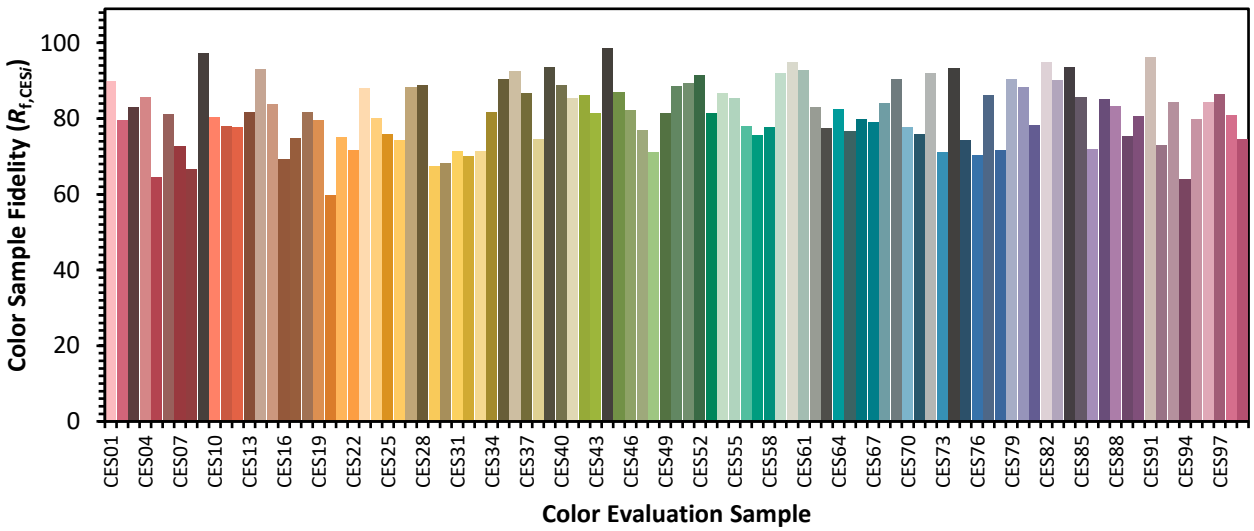
Individual Sample Fidelity Index ($R_{f,i}$)

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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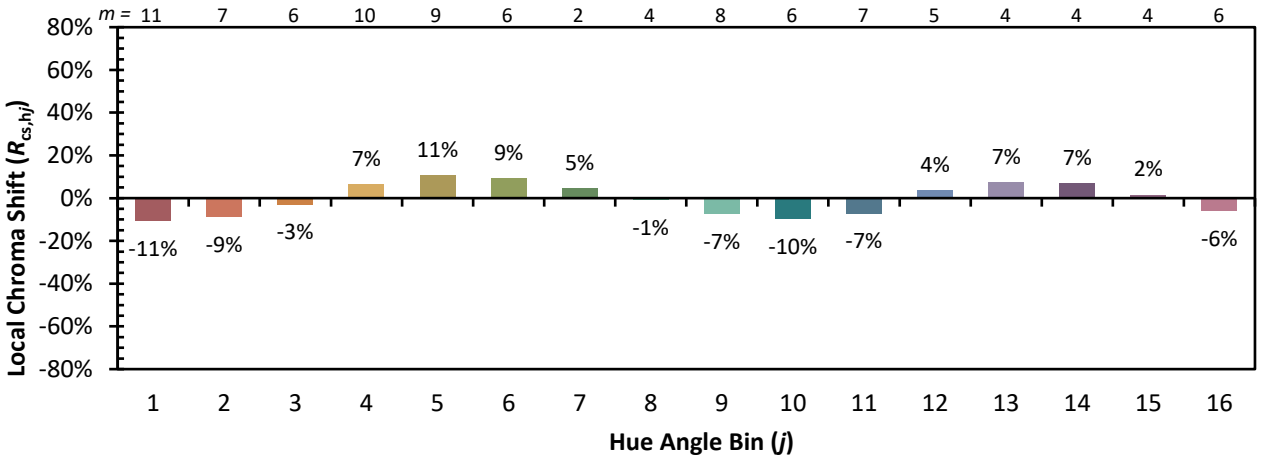
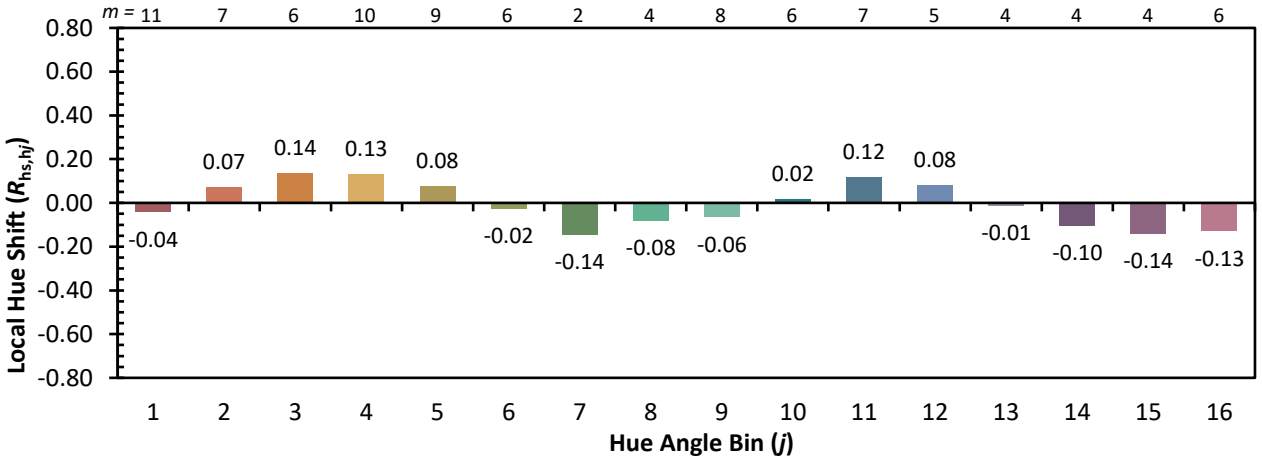
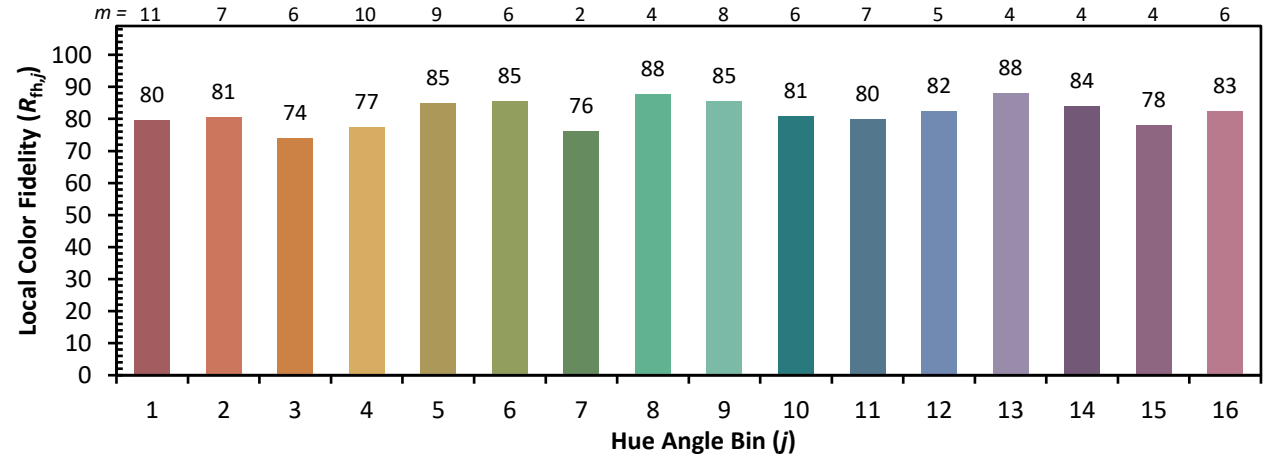
Color Rendition by Hue-Angle Bin







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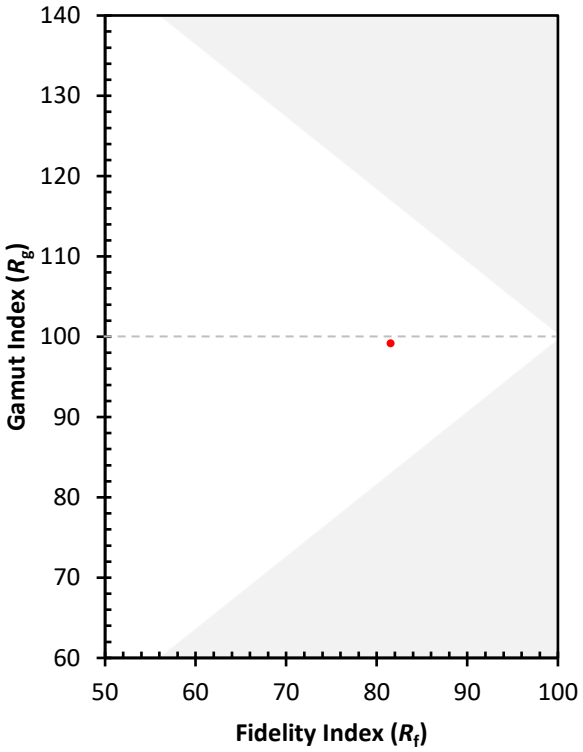
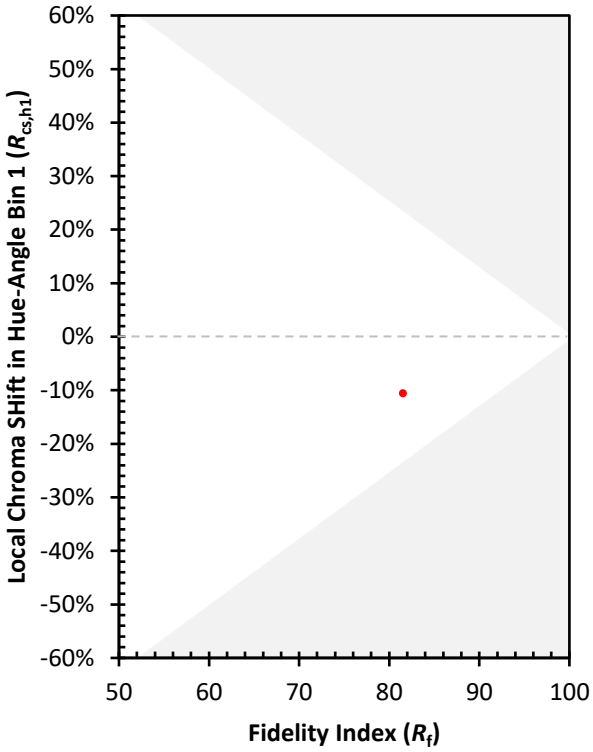
Measure Comparisons





(END OF REPORT)