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: P638984

Luminaire Tested: GWS-SA4F-830-U-T2-W-GRSWH

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:	P638984
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-21)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-T2-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSLLED GLARE SHIELD, WH
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	22534.4 lumens
Efficiency:	N/A
Efficacy:	100.0 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

Input Watts (W):	225.3
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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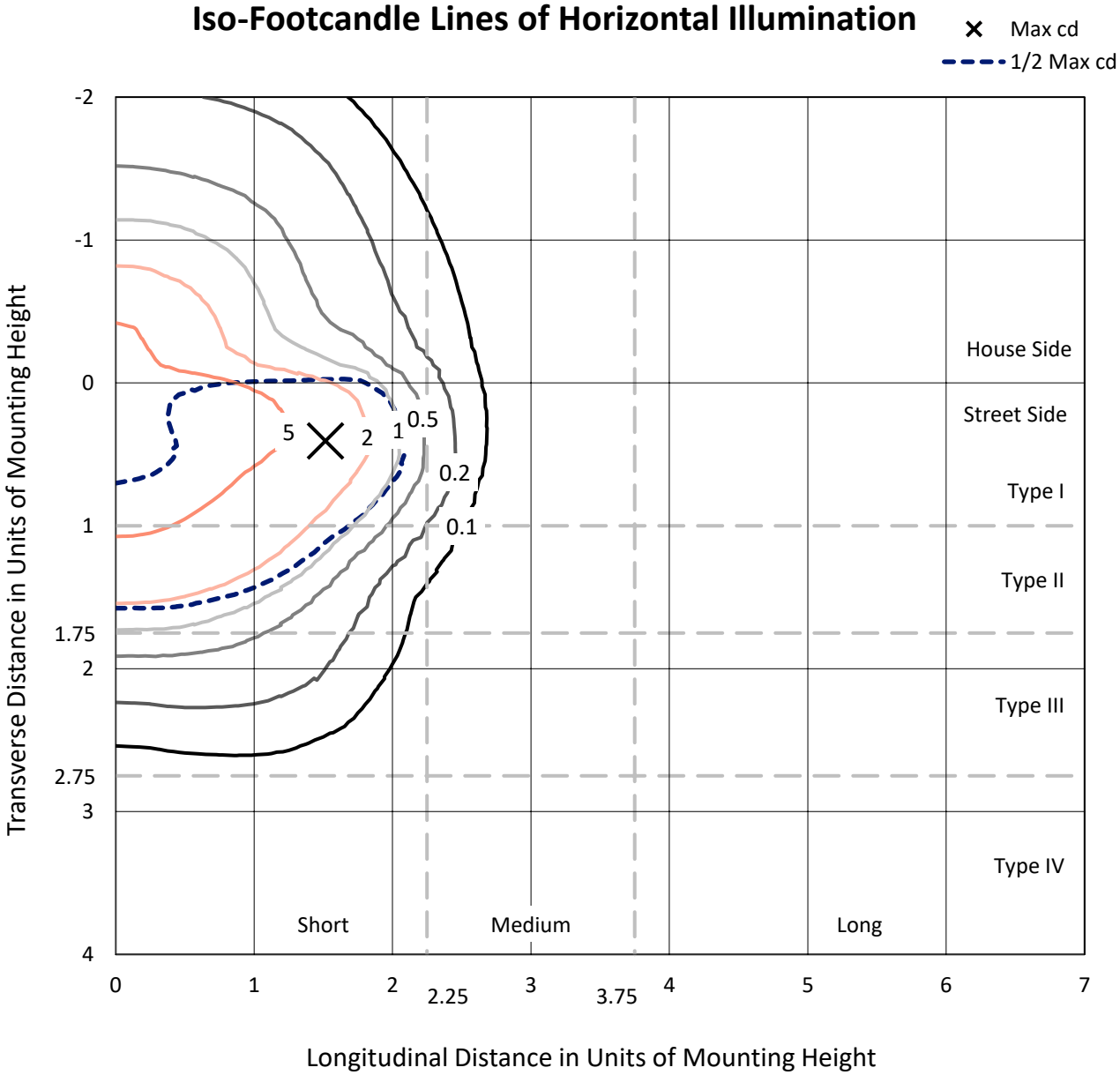
REPORT NUMBER: P638984
CATALOG NUMBER: GWS-SA4F-830-U-T2-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc
Type II - Short - N/A

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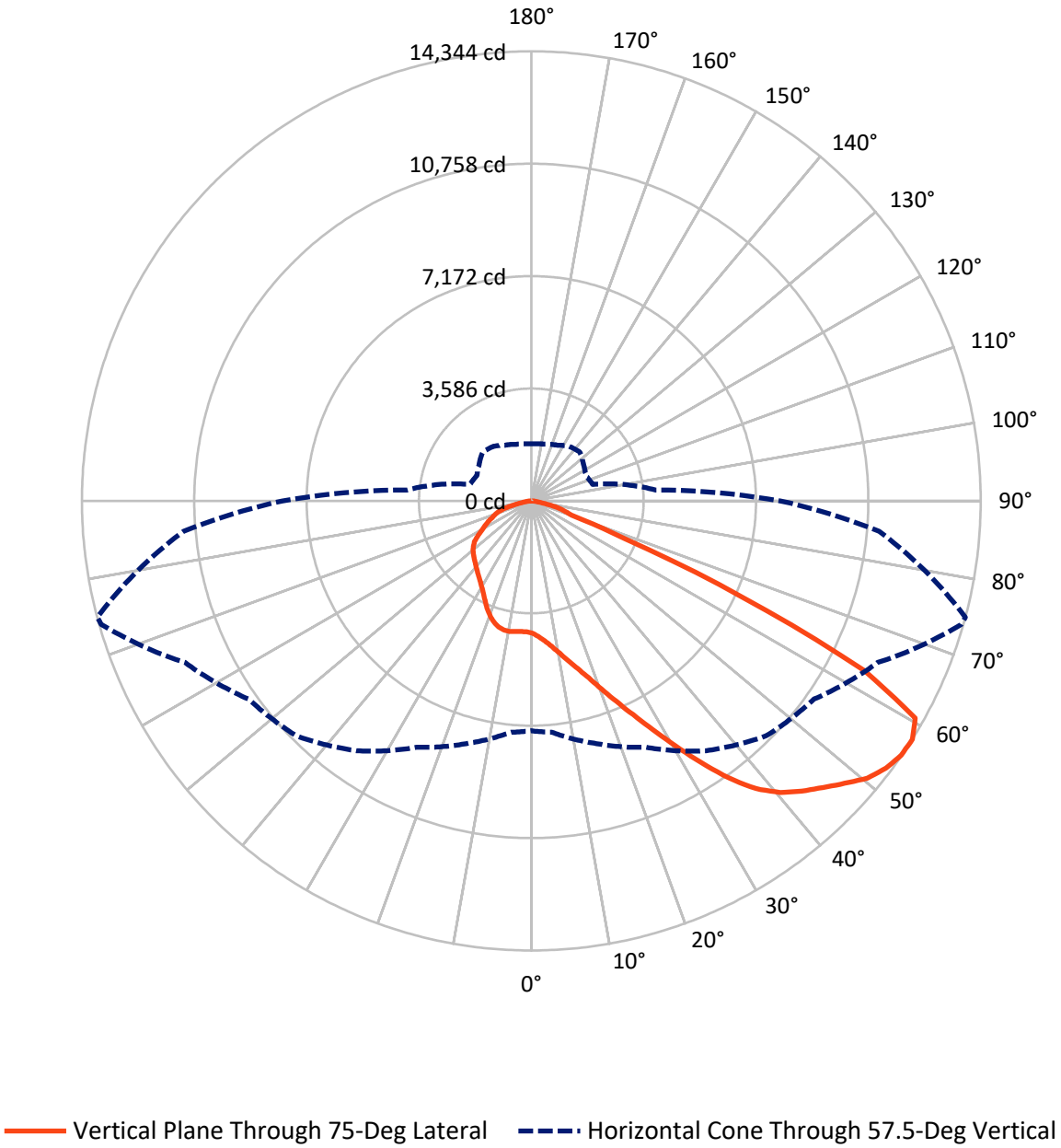
Luminous Intensity Polar Plot



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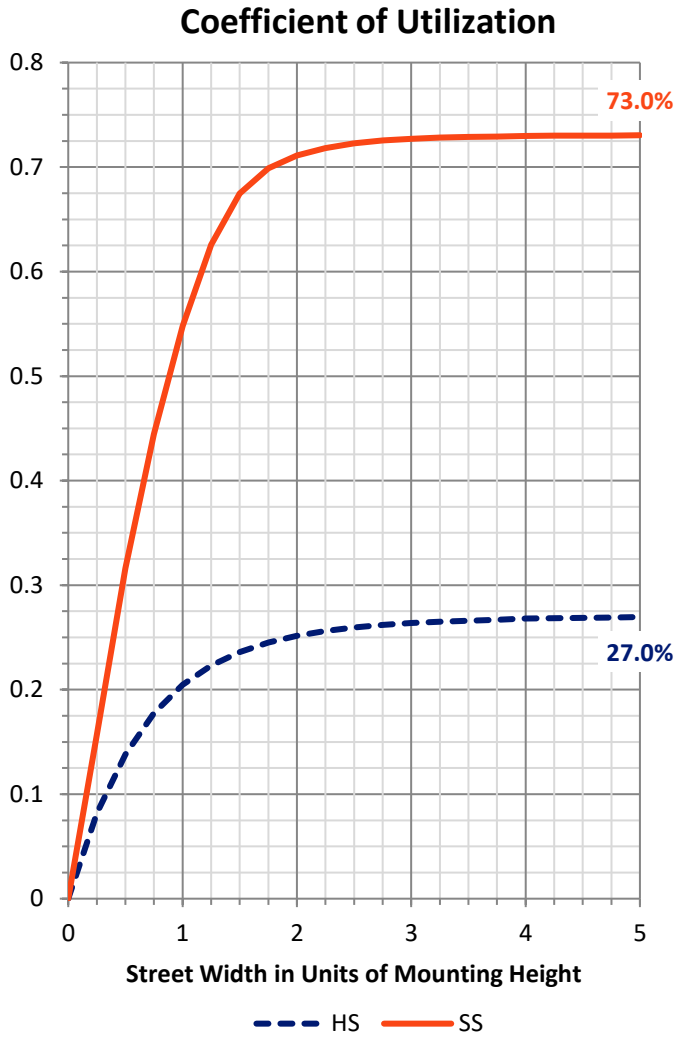
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6096.0	0.0	6096.0
	% Fixture	27.1	0.0	27.1
Street Side	Lumens	16438.4	0.0	16438.4
	% Fixture	72.9	0.0	72.9
Total	Lumens	22534.4	0.0	22534.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	422.3	1.9
10°-20°	1344.5	6.0
20°-30°	2384.5	10.6
30°-40°	3650.3	16.2
40°-50°	5082.7	22.6
50°-60°	5823.8	25.8
60°-70°	2992.4	13.3
70°-80°	753.4	3.3
80°-90°	80.5	0.4
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°	22534.4	100.0
0°-180°	22534.4	100.0



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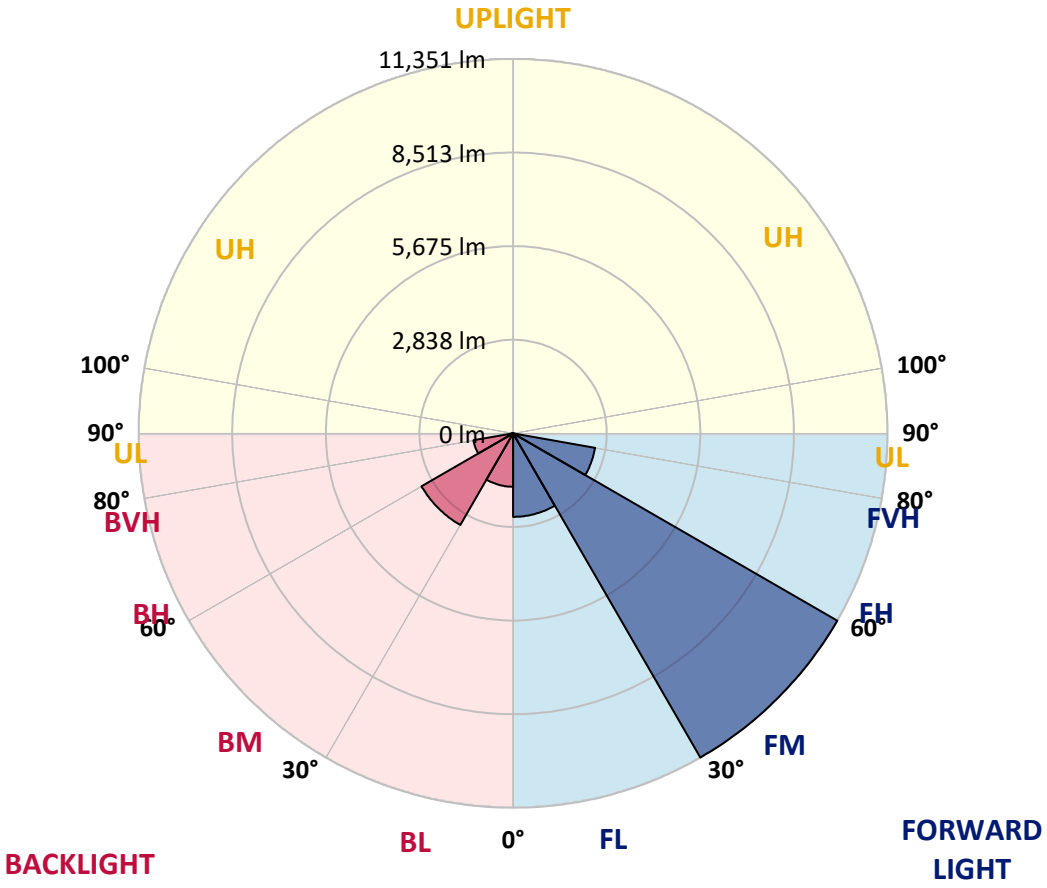
REPORT NUMBER: P638984
CATALOG NUMBER: GWS-SA4F-830-U-T2-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2531.9	11.2			
FM	(30°-60°)	11350.8	50.4			
FH	(60°-80°)	2525.9	11.2			G2/5000
FVH	(80°-90°)	29.8	0.1			G1/100
BL	(0°-30°)	1619.5	7.2	B3/2500		
BM	(30°-60°)	3206.0	14.2	B3/5000		
BH	(60°-80°)	1219.8	5.4	B3/2500		G3/2500
BVH	(80°-90°)	50.7	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type II Short



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REPORT NUMBER: P638984
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	4220.2	4220.2	4220.2	4220.2	4220.2	4220.2	4220.2	4220.2	4220.2	*4220.2*	4220.2
2.5°	4534.0	4545.7	4534.0	4553.4	4514.7	4497.2	4454.6	4390.7	4340.3	*4332.5*	4276.3
5°	4886.7	4911.9	4896.4	4888.6	4836.3	4797.6	4733.6	4605.7	4501.1	*4485.6*	4375.2
7.5°	5113.4	5130.8	5130.8	5136.6	5117.3	5072.7	5004.9	4853.8	4706.5	*4683.2*	4516.6
10°	5189.0	5202.5	5227.7	5276.2	5314.9	5328.5	5283.9	5138.6	4958.4	*4935.1*	4702.6
12.5°	5206.4	5221.9	5260.7	5349.8	5456.4	5553.2	5561.0	5454.4	5252.9	*5227.7*	4917.7
15°	5239.3	5254.8	5307.2	5417.6	5574.6	5760.6	5874.9	5801.3	5578.4	*5551.3*	5161.8
17.5°	5235.5	5252.9	5330.4	5477.7	5688.9	5958.2	6179.1	6210.1	5979.5	*5933.0*	5438.9
20°	5225.8	5241.3	5324.6	5504.8	5766.4	6136.5	6535.6	6696.4	6448.4	*6405.8*	5762.5
22.5°	5303.3	5320.7	5384.7	5533.9	5807.1	6274.0	6865.0	7252.5	7004.5	*6944.5*	6134.5
25°	5477.7	5502.9	5541.6	5644.3	5880.7	6396.1	7202.2	7882.3	7628.4	*7556.7*	6539.5
27.5°	5747.0	5778.0	5832.3	5880.7	6045.4	6551.1	7537.4	8587.6	8333.7	*8258.2*	6967.7
30°	6076.4	6117.1	6186.8	6219.8	6332.2	6779.8	7901.6	9314.2	9166.9	*9062.3*	7450.2
32.5°	6531.7	6587.9	6653.8	6663.5	6731.3	7126.6	8262.0	10035.0	10033.0	*9959.4*	7998.5
35°	7124.7	7184.7	7198.3	7211.8	7244.8	7603.2	8698.0	10691.8	10945.7	*10860.4*	8595.3
37.5°	7771.8	7859.0	7880.3	7820.3	7866.8	8176.8	9188.2	11218.9	11740.1	*11649.0*	9172.7
40°	8463.6	8498.4	8556.6	8461.6	8519.7	8833.6	9668.8	11556.0	12333.0	*12236.1*	9628.1
42.5°	8959.6	9023.5	9110.7	9075.8	9108.8	9395.6	10005.9	11718.8	12755.4	*12658.5*	9955.5
45°	9498.2	9517.6	9573.8	9566.1	9585.4	9852.8	10248.1	11790.5	13133.2	*13046.0*	10234.5
47.5°	9967.2	9996.2	10033.0	9990.4	9947.8	10122.2	10445.7	11852.5	13569.2	*13464.6*	10527.1
50°	10418.6	10443.8	10488.4	10364.4	10205.5	10250.0	10542.6	11937.7	13978.0	*13904.4*	10757.7
52.5°	10501.9	10529.1	10738.3	10763.5	10560.1	10403.1	10713.1	12125.7	14218.3	*14171.8*	10841.0
55°	9453.7	9502.1	9918.7	10397.3	10899.2	10848.8	10986.3	12224.5	14313.3	*14324.9*	10990.2
57.5°	*7337.8*	*7407.5*	*8016.0*	*8672.8*	*9728.8*	*10602.7*	*11021.2*	*12199.3*	*14280.3*	*14344.3*	*11143.3*
60°	4813.1	4853.8	5574.6	6310.9	7405.6	8614.7	9864.5	11745.9	13987.7	*14078.8*	11104.5
62.5°	2906.4	2952.9	3532.3	4090.3	4735.6	5543.6	6690.6	9440.1	11724.6	*11928.0*	8893.7
65°	2028.7	2090.7	2598.4	3057.6	3280.4	3113.8	3388.9	5272.3	7304.9	*7390.1*	5435.0
67.5°	1470.7	1513.3	1929.9	2476.3	2722.4	2199.2	1676.0	2334.8	3181.6	*3212.6*	2241.8
70°	963.0	1011.4	1389.3	1885.3	2222.5	1782.6	1253.6	1263.3	1338.9	*1354.4*	1302.1
72.5°	529.0	558.0	858.4	1251.7	1313.7	1065.7	978.5	1050.2	1102.5	*1102.5*	1116.1
75°	273.2	298.4	350.7	412.7	498.0	583.2	705.3	811.9	868.1	*871.9*	866.1
77.5°	139.5	149.2	187.9	203.5	222.8	259.6	337.1	432.1	482.5	*501.8*	498.0
80°	65.9	69.8	79.4	93.0	114.3	145.3	182.1	217.0	248.0	*251.9*	273.2
82.5°	34.9	38.8	42.6	50.4	62.0	77.5	106.6	127.9	147.3	*151.1*	168.6
85°	13.6	15.5	17.4	19.4	27.1	32.9	44.6	60.1	73.6	*73.6*	87.2
87.5°	0.0	0.0	0.0	0.0	1.9	3.9	7.8	9.7	13.6	*13.6*	23.3
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: P638984
CATALOG NUMBER: GWS-SA4F-830-U-T2-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4220.2	4220.2	4220.2	4220.2	4220.2	4220.2	4220.2	4220.2	4220.2	4220.2	4220.2
2.5°	4262.8	4206.6	4181.4	4140.7	4107.8	4071.0	4041.9	4020.6	4007.0	3999.3	3991.5
5°	4332.5	4247.3	4179.5	4098.1	4041.9	3987.6	3943.1	3912.1	3896.6	3884.9	3877.2
7.5°	4441.0	4326.7	4198.8	4072.9	3974.1	3886.9	3830.7	3797.7	3776.4	3768.7	3762.9
10°	4590.2	4431.4	4220.2	4020.6	3873.3	3778.4	3739.6	3724.1	3726.1	3722.2	3720.2
12.5°	4758.8	4541.8	4214.3	3927.6	3764.8	3708.6	3710.6	3735.7	3764.8	3772.6	3774.5
15°	4940.9	4650.3	4158.1	3807.4	3679.6	3685.4	3735.7	3795.8	3850.1	3871.4	3875.3
17.5°	5138.6	4741.4	4055.5	3675.7	3609.8	3671.8	3764.8	3863.6	3943.1	3977.9	3987.6
20°	5359.5	4818.9	3910.1	3545.9	3543.9	3646.6	3782.2	3912.1	4012.8	4059.3	4067.1
22.5°	5593.9	4867.3	3731.9	3425.7	3476.1	3613.7	3768.7	3904.3	4010.9	4057.4	4067.1
25°	5830.3	4882.8	3536.2	3315.3	3406.3	3561.4	3702.8	3811.3	3912.1	3952.8	3960.5
27.5°	6051.2	4838.3	3350.2	3220.3	3342.4	3483.9	3578.8	3636.9	3706.7	3737.7	3743.5
30°	6276.0	4749.1	3193.2	3144.8	3270.7	3377.3	3419.9	3423.8	3450.9	3450.9	3454.8
32.5°	6502.7	4617.4	3055.6	3071.1	3181.6	3251.3	3257.2	3212.6	3179.6	3125.4	3123.5
35°	6764.3	4483.7	2943.3	2987.8	3077.0	3119.6	3102.1	3016.9	2937.4	2848.3	2844.4
37.5°	7006.5	4346.1	2848.3	2902.6	2958.8	2989.8	2949.1	2846.4	2780.5	2689.4	2675.9
40°	7206.0	4222.1	2757.2	2813.4	2840.6	2867.7	2801.8	2718.5	2728.2	2677.8	2675.9
42.5°	7322.3	4102.0	2672.0	2714.6	2732.1	2751.4	2693.3	2631.3	2683.6	2644.9	2646.8
45°	7407.5	3997.3	2594.5	2610.0	2652.6	2681.7	2627.4	2557.7	2569.3	2420.1	2385.2
47.5°	7504.4	3939.2	2520.9	2505.4	2580.9	2631.3	2548.0	2447.2	2377.5	2230.2	2216.6
50°	7607.1	3917.9	2443.3	2400.7	2491.8	2540.2	2443.3	2317.4	2226.3	2146.9	2139.1
52.5°	7642.0	3915.9	2346.5	2274.8	2365.8	2433.7	2352.3	2224.4	2115.9	2038.4	2034.5
55°	7779.6	3972.1	2222.5	2102.3	2187.6	2327.1	2267.0	2082.9	1995.8	1960.9	1957.0
57.5°	*7940.4*	*3981.8*	*2026.8*	*1914.4*	*2032.6*	*2197.3*	*2121.7*	*1962.8*	*1867.9*	*1825.2*	*1821.4*
60°	7874.5	3743.5	1817.5	1771.0	1900.8	2075.2	2005.4	1867.9	1757.4	1716.7	1712.9
62.5°	6000.8	2642.9	1664.4	1647.0	1759.4	1898.9	1885.3	1741.9	1637.3	1608.2	1604.4
65°	3609.8	1856.2	1517.2	1515.2	1594.7	1728.4	1745.8	1629.5	1519.1	1478.4	1478.4
67.5°	1784.6	1420.3	1350.5	1340.8	1391.2	1486.2	1559.8	1464.8	1371.8	1333.1	1327.3
70°	1261.4	1251.7	1228.5	1201.3	1211.0	1249.8	1280.8	1201.3	1102.5	1063.8	1056.0
72.5°	1090.9	1092.8	1077.3	1056.0	1048.3	1021.1	994.0	935.9	875.8	835.1	839.0
75°	846.7	850.6	860.3	852.6	831.2	802.2	773.1	699.5	651.0	612.3	604.5
77.5°	494.1	513.5	544.5	536.7	540.6	499.9	488.3	416.6	372.0	344.9	339.1
80°	279.0	290.6	304.2	313.9	302.3	284.8	259.6	220.9	207.3	187.9	184.1
82.5°	168.6	180.2	186.0	193.8	189.9	166.6	147.3	122.1	110.4	100.8	98.8
85°	85.3	93.0	98.8	102.7	91.1	75.6	67.8	54.3	46.5	40.7	40.7
87.5°	21.3	23.3	27.1	23.3	21.3	9.7	7.8	1.9	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

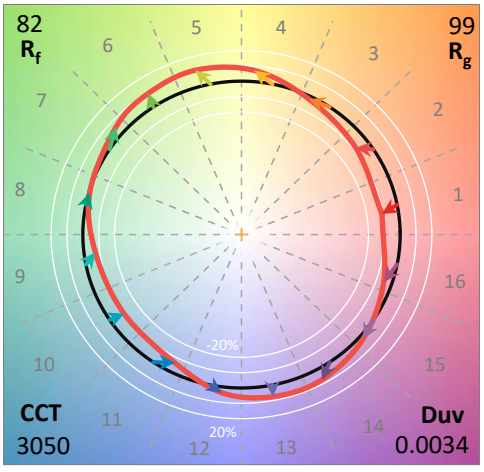
Test Information

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

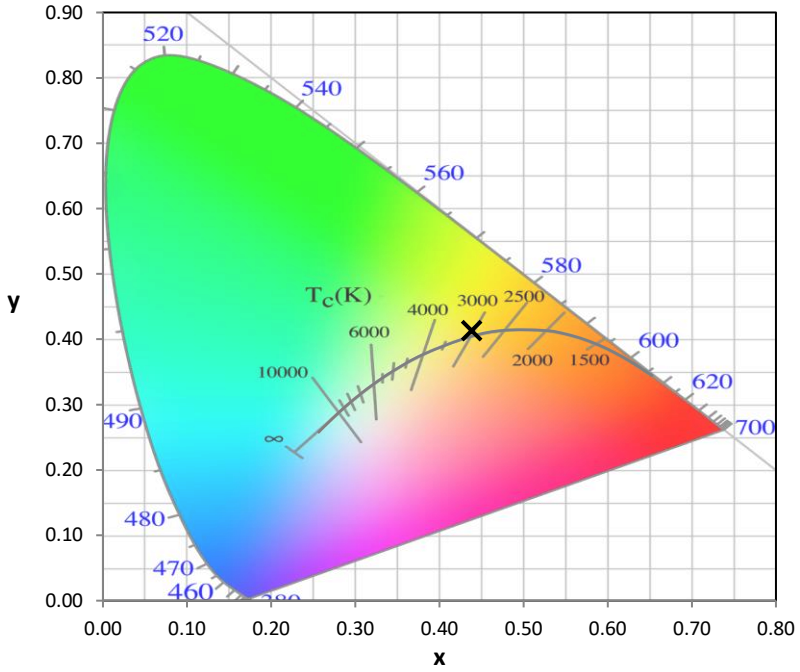
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

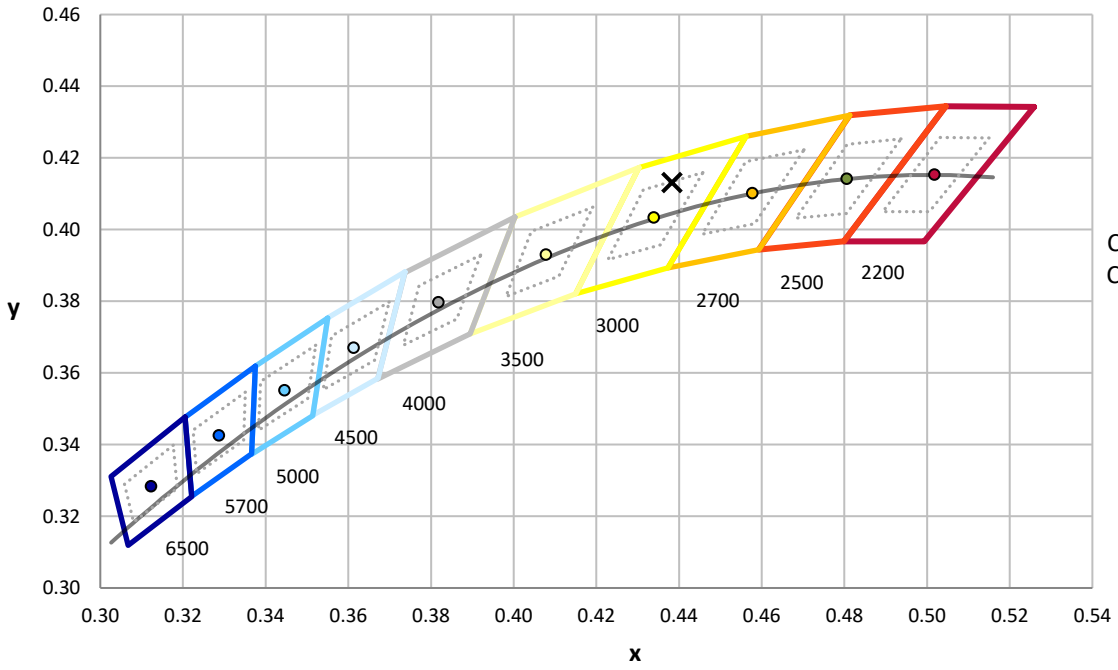
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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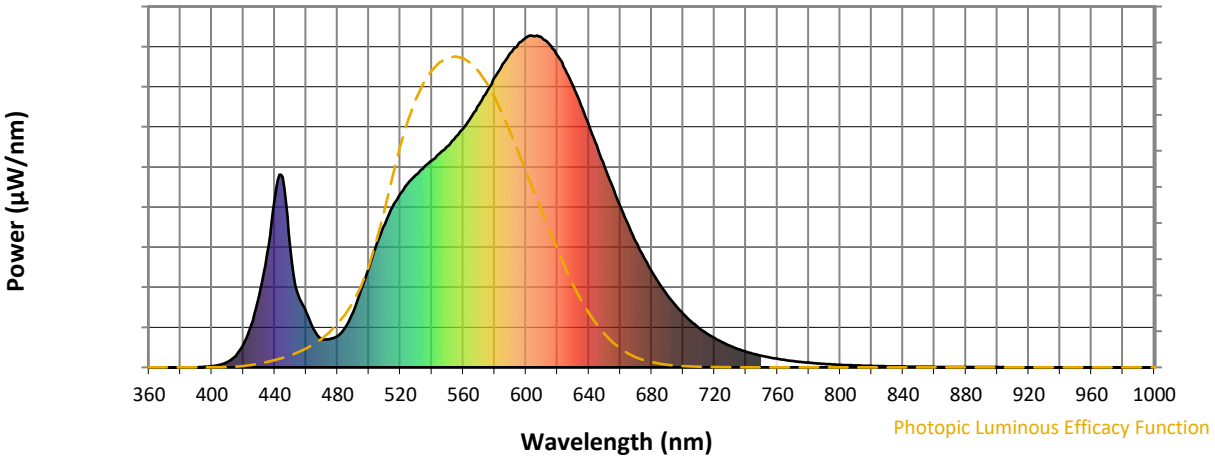
Photopic Flux vs. Wavelength



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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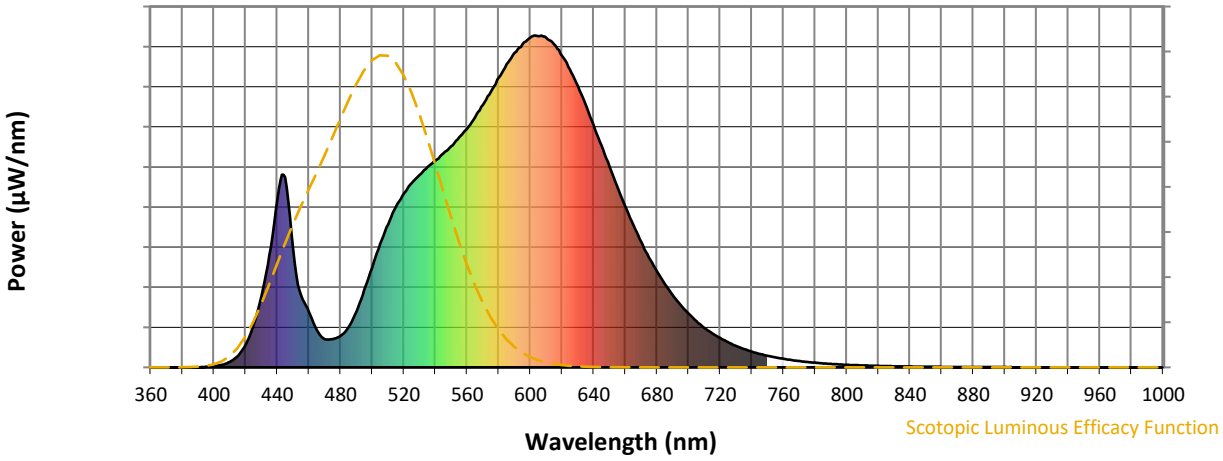
Scotopic Flux vs. Wavelength



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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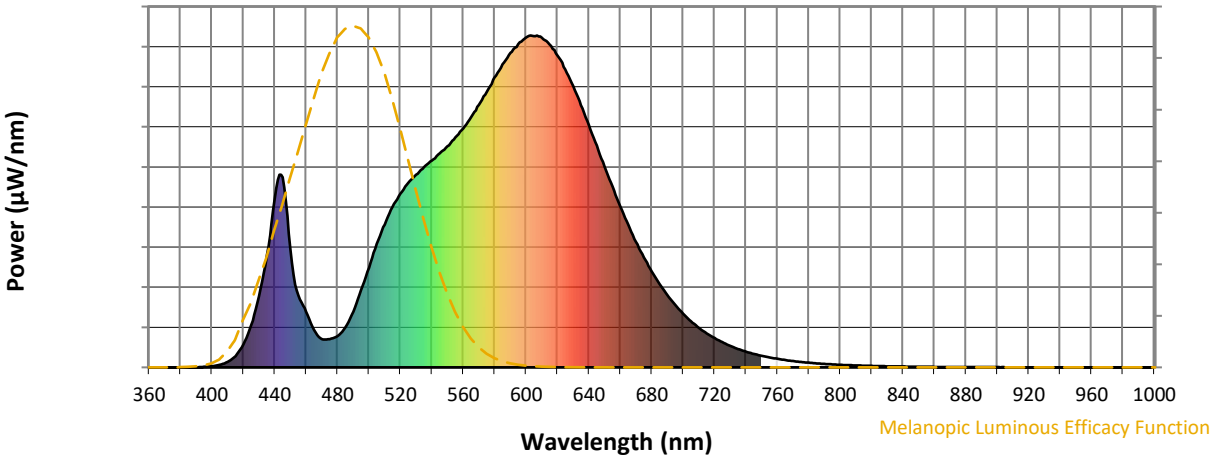
Melanopic Flux vs. Wavelength



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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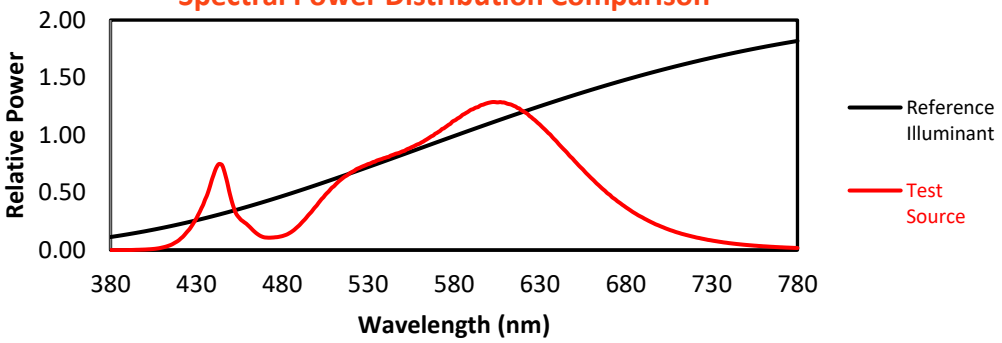
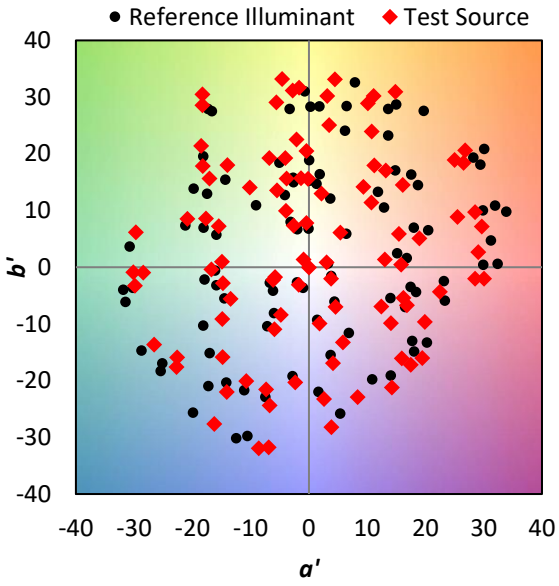
Summary

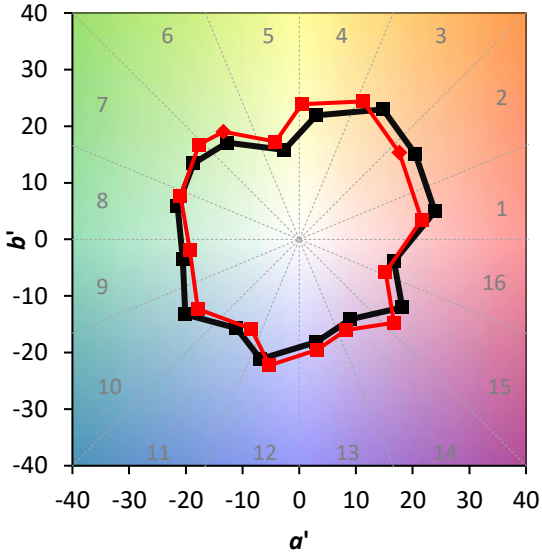
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

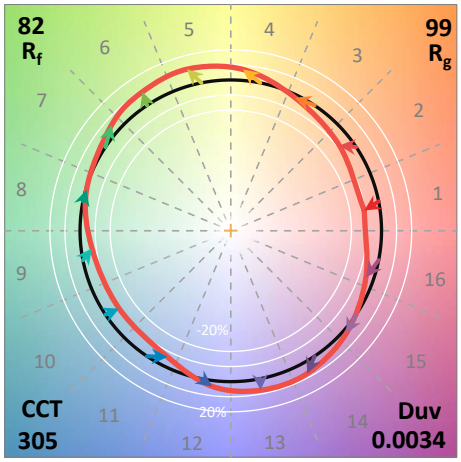
Spectral Power Distribution Comparison

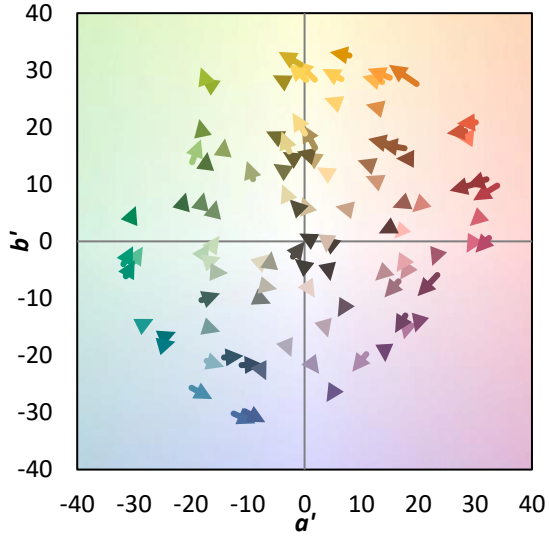


Color Vector Graphics









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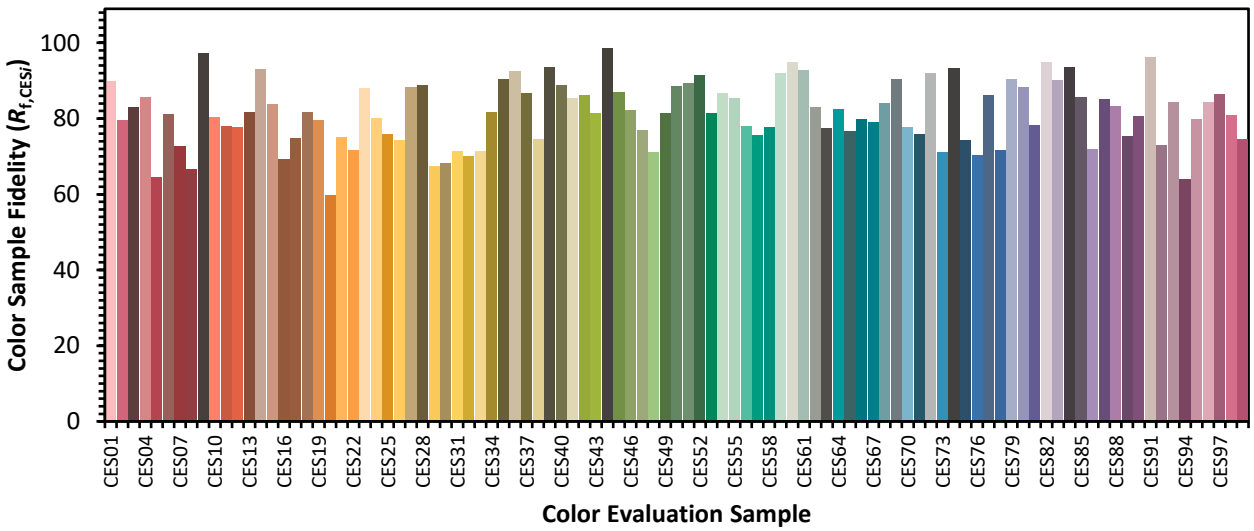
Individual Sample Fidelity Index ($R_{f,i}$)

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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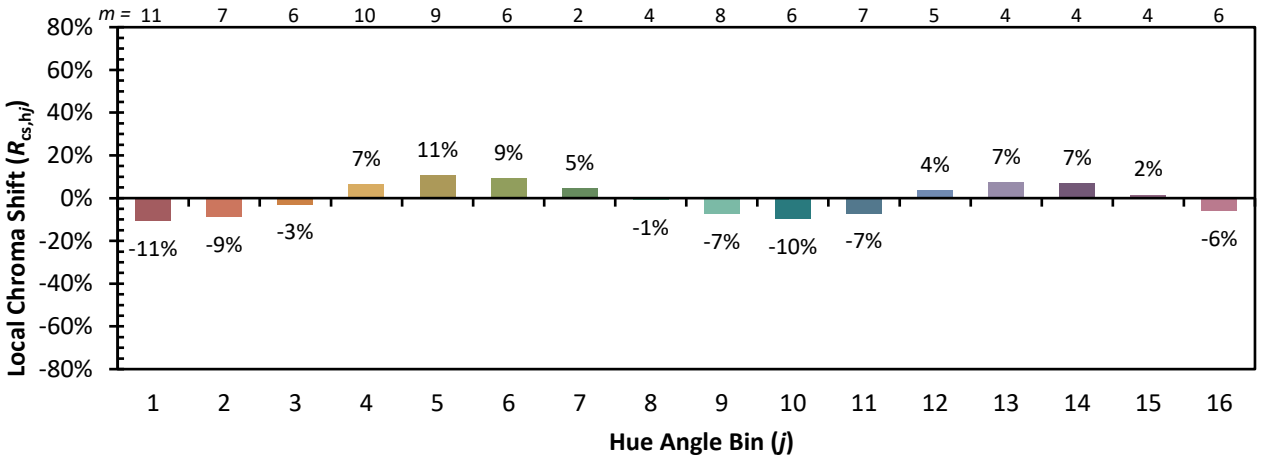
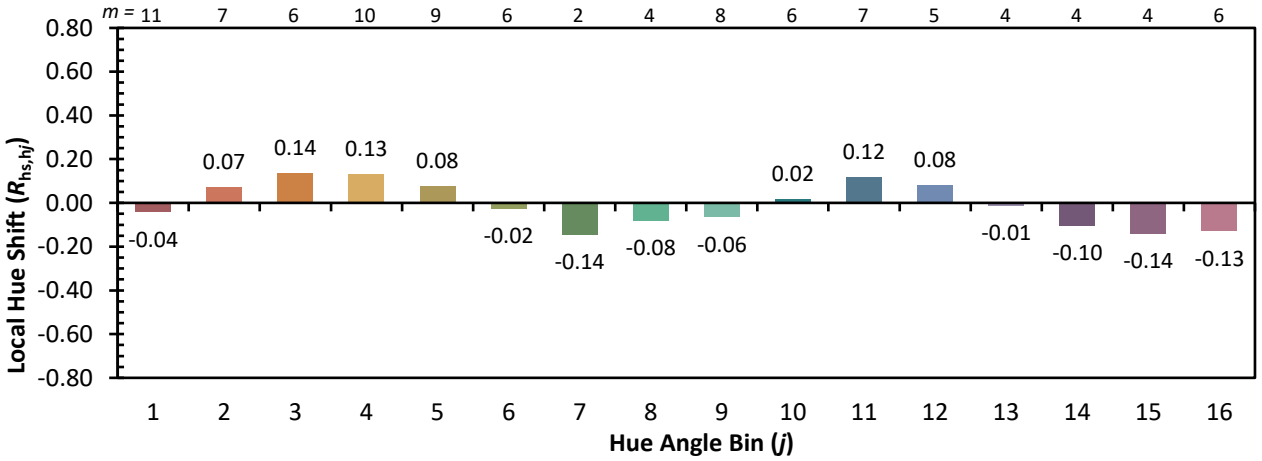
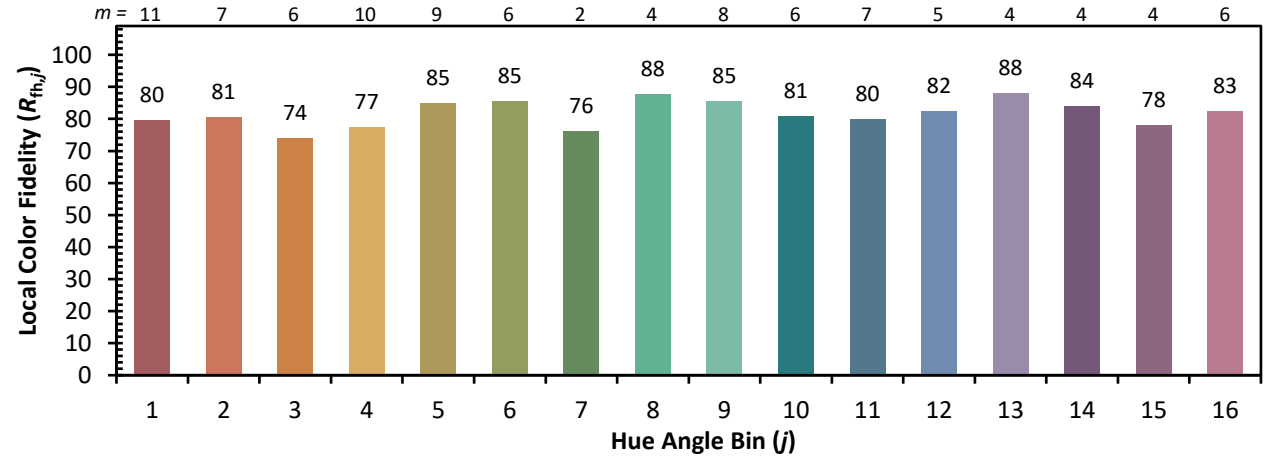
Color Rendition by Hue-Angle Bin







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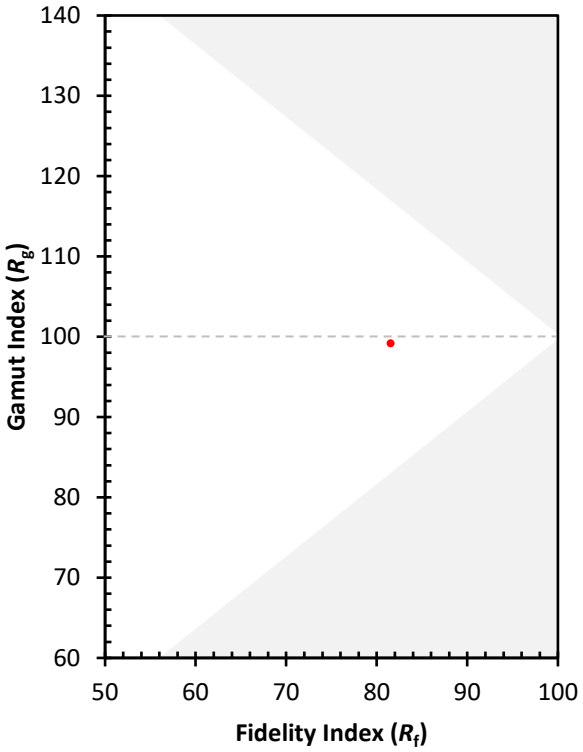
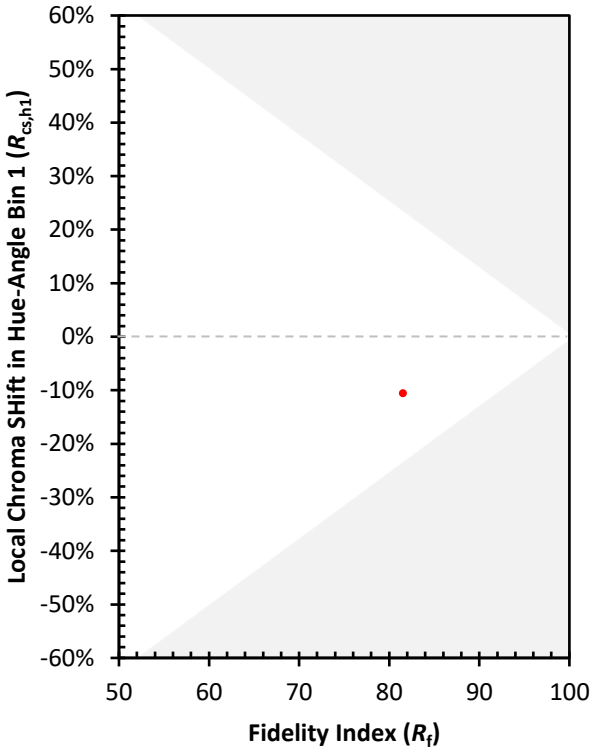
Measure Comparisons





(END OF REPORT)