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: P640474

Luminaire Tested: GWS-SA5D-830-U-T2R-W-HSS

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:	P640474
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-14)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5D-830-U-T2R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19246 lumens
Efficiency:	N/A
Efficacy:	94.1 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

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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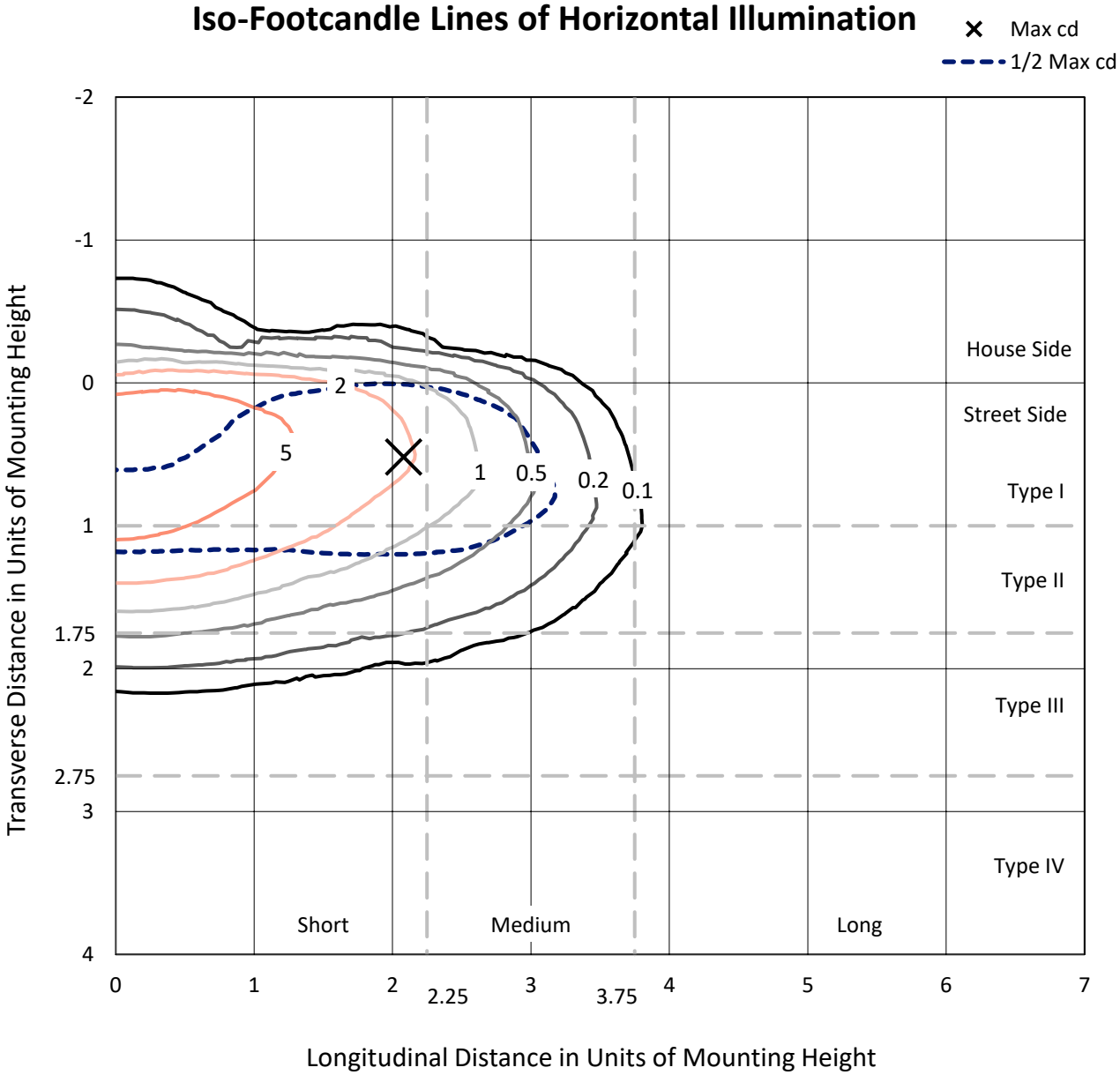
REPORT NUMBER: P640474
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
Type II - Short - N/A

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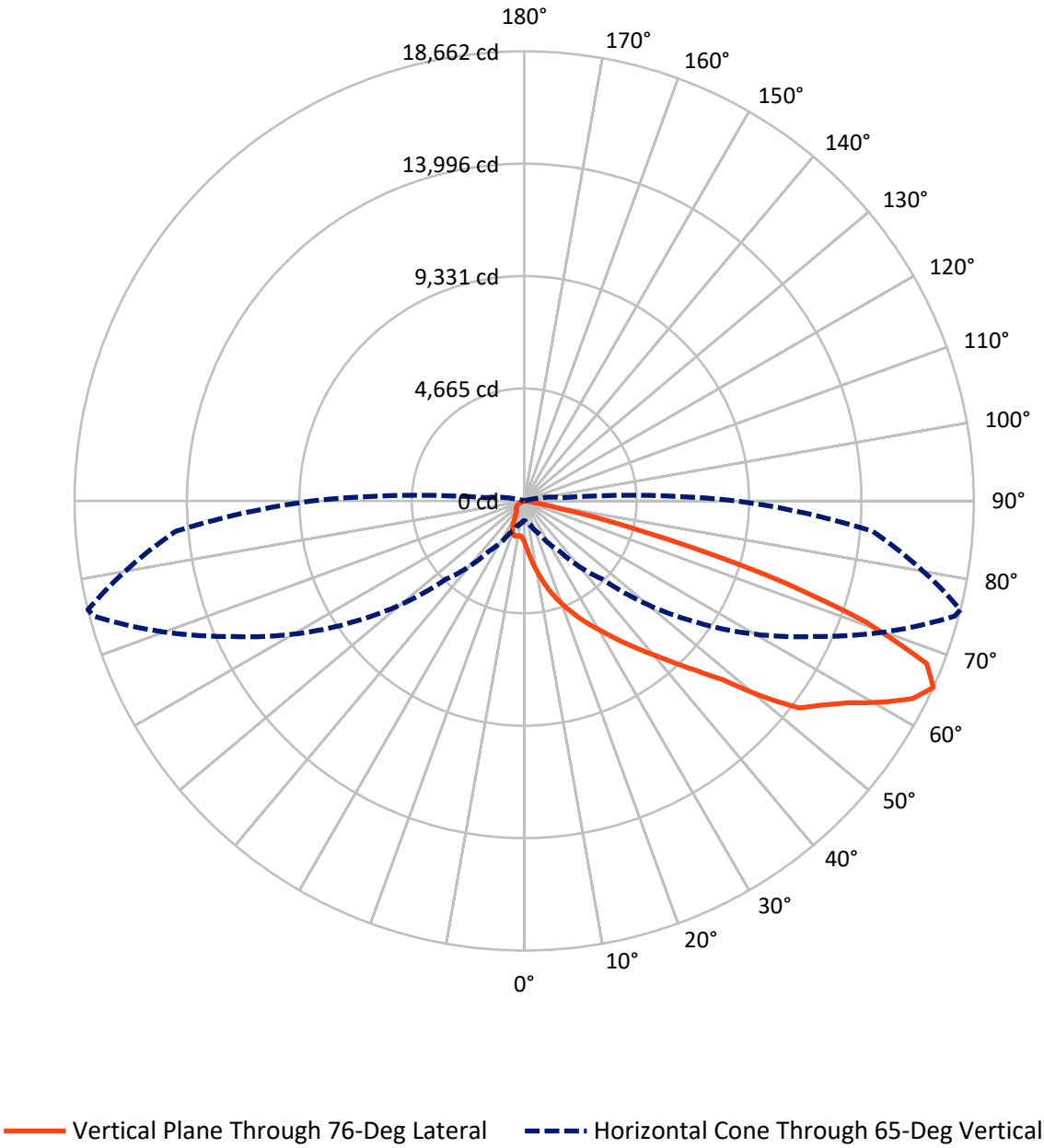
Luminous Intensity Polar Plot



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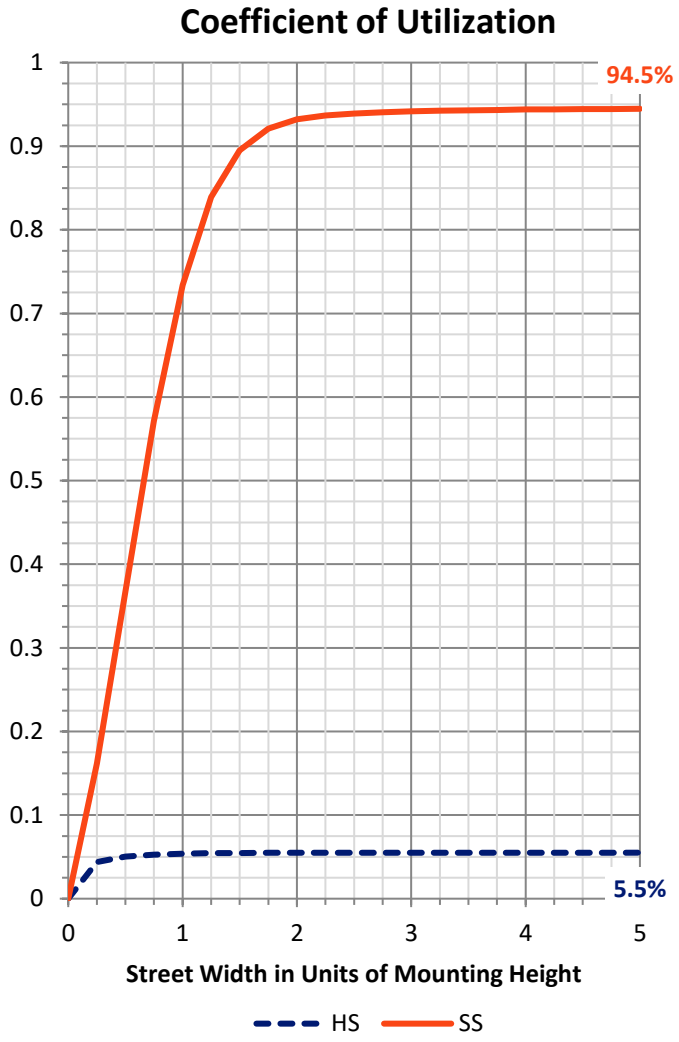
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1064.2	0.0	1064.2
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	18181.8	0.0	18181.8
	% Fixture	94.5	0.0	94.5
Total	Lumens	19246.0	0.0	19246.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.3	1.1
10°-20°	786.6	4.1
20°-30°	1604.7	8.3
30°-40°	2854.1	14.8
40°-50°	4219.0	21.9
50°-60°	4830.5	25.1
60°-70°	3685.4	19.1
70°-80°	1032.4	5.4
80°-90°	26.0	0.1
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°	19246.0	100.0
0°-180°	19246.0	100.0



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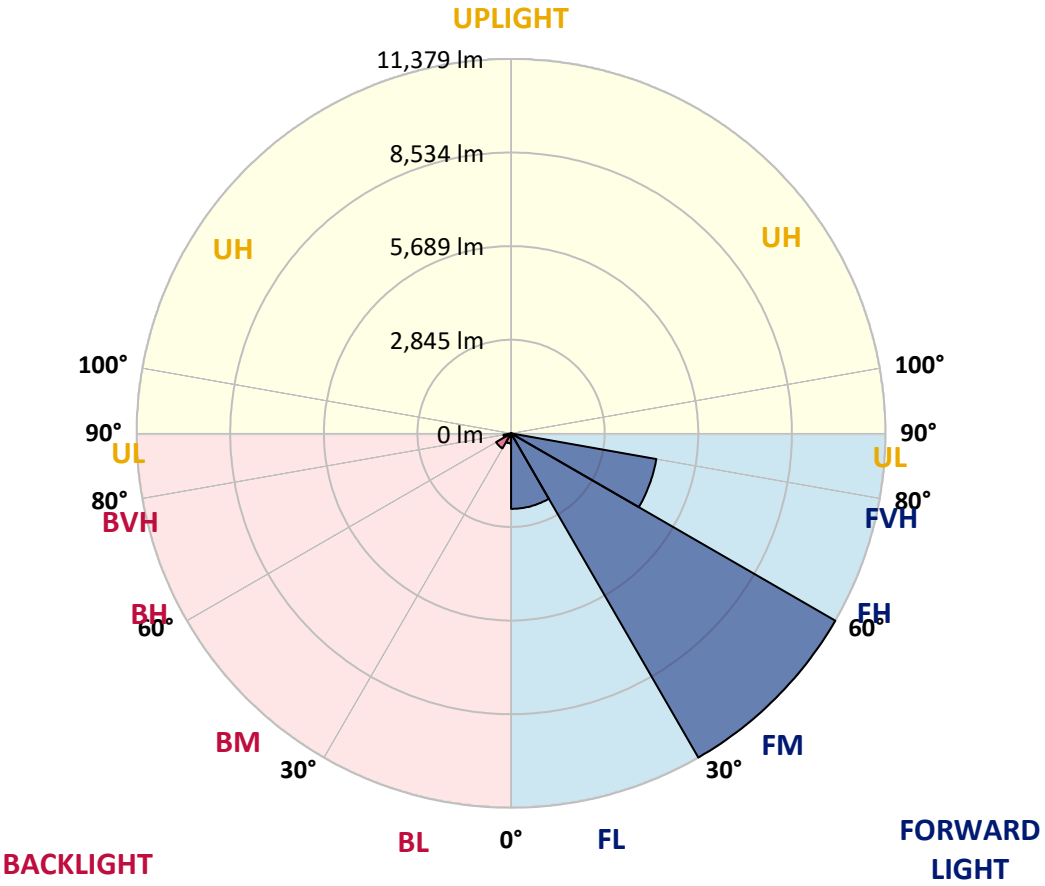
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2294.9	11.9			
FM	(30°-60°)	11378.5	59.1			
FH	(60°-80°)	4483.9	23.3			G2/5000
FVH	(80°-90°)	24.5	0.1			G1/100
BL	(0°-30°)	303.7	1.6	B1/500		
BM	(30°-60°)	525.1	2.7	B1/1000		
BH	(60°-80°)	233.9	1.2	B1/500		G1/500
BVH	(80°-90°)	1.5	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-G2
Type II Short



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REPORT NUMBER: P640474
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1704.0	1704.0	1704.0	1704.0	1704.0	1704.0	1704.0	1704.0	1704.0	*1704.0*	1704.0
2.5°	2626.1	2665.5	2634.7	2583.3	2484.1	2388.3	2265.1	2095.7	1960.6	*1943.5*	1816.9
5°	3546.5	3543.1	3476.4	3409.7	3305.3	3141.1	2893.0	2578.2	2275.4	*2249.7*	1965.7
7.5°	4094.0	4099.1	4061.5	4010.2	3907.5	3738.1	3479.8	3100.0	2656.9	*2605.6*	2169.3
10°	4554.2	4552.5	4525.1	4501.2	4408.8	4295.9	4018.7	3601.3	3067.5	*2987.1*	2396.9
12.5°	4899.8	4911.8	4925.4	4949.4	4910.0	4798.8	4537.1	4082.0	3483.2	*3394.3*	2656.9
15°	5173.5	5176.9	5228.3	5320.6	5353.1	5295.0	5057.2	4547.3	3893.8	*3816.8*	2956.3
17.5°	5255.6	5262.5	5349.7	5519.1	5690.2	5722.7	5543.0	5016.1	4297.6	*4215.5*	3247.1
20°	5428.4	5443.8	5508.8	5657.7	5873.2	6047.7	5977.6	5490.0	4701.3	*4593.5*	3544.8
22.5°	5972.5	5981.0	5958.8	5977.6	6088.8	6290.7	6333.4	5948.5	5115.3	*5000.7*	3866.4
25°	6908.3	6911.7	6756.0	6608.9	6525.1	6562.7	6656.8	6371.1	5525.9	*5413.0*	4165.8
27.5°	7880.0	7892.0	7705.5	7455.7	7156.3	6985.3	6957.9	6757.7	5940.0	*5815.1*	4461.8
30°	8795.3	8795.3	8598.6	8294.0	7893.7	7560.1	7363.4	7147.8	6383.1	*6246.2*	4764.6
32.5°	9618.2	9611.4	9359.9	9029.7	8634.5	8268.4	7854.4	7555.0	6875.8	*6723.5*	5113.6
35°	10297.4	10280.3	9994.6	9678.1	9255.5	8983.5	8521.6	7992.9	7409.5	*7257.3*	5472.9
37.5°	10810.6	10791.8	10530.1	10194.8	9803.0	9626.8	9240.1	8518.2	7972.4	*7833.8*	5871.5
40°	11089.5	11051.9	10870.5	10620.7	10292.3	10138.3	9977.5	9170.0	8634.5	*8461.7*	6342.0
42.5°	11171.6	11127.1	11007.4	10891.1	10692.6	10571.1	10743.9	9905.6	9361.6	*9212.7*	6879.2
45°	10928.7	10903.0	10892.8	10976.6	11012.5	11046.7	11472.7	10720.0	10164.0	*10051.0*	7555.0
47.5°	10343.6	10336.8	10427.4	10776.4	11156.2	11517.2	12264.8	11724.2	11204.1	*11082.7*	8499.3
50°	9262.4	9332.5	9585.7	10198.2	10957.8	11784.1	13005.6	13116.8	12887.6	*12709.7*	9731.1
52.5°	7572.1	7707.2	8275.2	9205.9	10297.4	11708.8	13347.8	14232.3	14466.7	*14281.9*	10613.9
55°	5941.7	6068.3	6574.7	7755.1	9211.0	11135.7	13363.2	14617.2	15128.7	*14957.7*	11211.0
57.5°	4425.9	4542.2	5002.4	6131.6	7732.9	10008.3	12997.1	14831.1	15914.0	*15804.5*	12153.6
60°	2893.0	3007.6	3423.3	4410.5	5998.1	8365.9	12095.5	14786.6	16983.3	*16973.0*	13311.9
62.5°	1604.7	1695.4	1996.5	2766.4	4186.4	6478.9	10678.9	14340.1	18018.3	*18083.3*	14266.5
65°	*821.2*	*879.4*	*1062.4*	*1520.9*	*2533.7*	*4593.5*	*8815.8*	*13317.0*	*18497.3*	*18661.6*	*14518.0*
67.5°	537.2	556.0	600.5	790.4	1356.7	2889.6	6634.5	11676.3	17823.3	*18014.9*	13674.6
70°	436.3	451.7	477.3	526.9	699.7	1534.6	4357.4	9325.7	14892.7	*15022.7*	10889.3
72.5°	319.9	340.5	390.1	422.6	504.7	841.7	2266.8	6121.3	10227.3	*10456.5*	6843.3
75°	236.1	248.1	289.1	333.6	412.3	532.1	867.4	3218.0	5281.3	*5147.8*	2874.2
77.5°	142.0	150.6	184.8	213.9	294.3	331.9	302.8	1189.0	1606.5	*1510.7*	694.6
80°	70.1	78.7	121.5	160.8	188.2	133.4	126.6	331.9	357.6	*357.6*	174.5
82.5°	24.0	30.8	65.0	106.1	92.4	51.3	59.9	85.5	95.8	*100.9*	51.3
85°	0.0	0.0	15.4	30.8	13.7	6.8	15.4	18.8	24.0	*25.7*	17.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	5.1	*6.8*	6.8
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: P640474
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1704.0	1704.0	1704.0	1704.0	1704.0	1704.0	1704.0	1704.0	1704.0	1704.0	1704.0
2.5°	1748.5	1668.0	1546.6	1437.1	1353.3	1274.6	1214.7	1166.8	1158.2	1130.8	1134.3
5°	1827.2	1681.7	1457.6	1284.8	1163.4	1081.2	1012.8	961.5	939.2	917.0	899.9
7.5°	1948.6	1738.2	1423.4	1213.0	1071.0	944.4	838.3	752.8	711.7	686.0	668.9
10°	2097.5	1816.9	1425.1	1170.2	959.8	766.4	621.0	526.9	482.5	468.8	467.1
12.5°	2275.4	1916.1	1438.8	1100.1	799.0	569.7	460.2	417.4	403.8	391.8	391.8
15°	2463.6	2027.3	1438.8	971.7	609.1	444.8	398.6	371.2	354.1	347.3	343.9
17.5°	2662.0	2131.7	1404.6	795.5	467.1	391.8	354.1	328.5	314.8	304.5	301.1
20°	2874.2	2230.9	1319.0	609.1	400.3	350.7	314.8	289.1	275.4	265.2	265.2
22.5°	3089.7	2323.3	1180.5	468.8	354.1	311.4	277.2	253.2	239.5	229.2	229.2
25°	3289.9	2384.9	1002.5	386.6	319.9	277.2	246.4	222.4	207.0	200.2	196.7
27.5°	3476.4	2424.2	805.8	340.5	287.4	248.1	215.6	193.3	181.3	176.2	172.8
30°	3669.7	2434.5	615.9	309.7	260.0	219.0	188.2	171.1	160.8	154.0	154.0
32.5°	3857.9	2422.5	470.5	284.0	236.1	193.3	167.7	152.3	143.7	138.6	136.9
35°	4049.5	2367.8	381.5	261.8	212.1	169.4	148.8	136.9	131.7	124.9	124.9
37.5°	4258.2	2294.2	331.9	239.5	188.2	152.3	133.4	124.9	118.0	112.9	111.2
40°	4518.3	2208.7	304.5	220.7	165.9	136.9	119.8	111.2	106.1	100.9	99.2
42.5°	4826.2	2124.8	290.8	200.2	148.8	121.5	107.8	97.5	92.4	85.5	83.8
45°	5262.5	2106.0	275.4	177.9	133.4	109.5	94.1	83.8	77.0	71.9	70.1
47.5°	5963.9	2159.1	249.8	154.0	118.0	95.8	80.4	71.9	63.3	58.2	54.7
50°	6660.2	2145.4	224.1	133.4	104.4	82.1	68.4	59.9	51.3	46.2	44.5
52.5°	7040.0	2080.4	200.2	118.0	90.7	70.1	58.2	47.9	42.8	37.6	35.9
55°	7383.9	2054.7	176.2	102.6	77.0	61.6	47.9	39.3	35.9	30.8	29.1
57.5°	8057.9	2114.6	155.7	89.0	66.7	53.0	41.1	32.5	29.1	24.0	22.2
60°	8762.8	2121.4	133.4	77.0	58.2	44.5	32.5	25.7	22.2	17.1	15.4
62.5°	9130.6	1948.6	109.5	65.0	47.9	37.6	27.4	20.5	17.1	10.3	10.3
65°	*8822.7*	*1575.7*	*92.4*	*53.0*	*37.6*	*29.1*	*20.5*	*15.4*	*10.3*	*5.1*	*1.7*
67.5°	7808.2	1120.6	77.0	42.8	27.4	20.5	15.4	10.3	1.7	0.0	0.0
70°	5717.5	639.8	59.9	30.8	20.5	13.7	10.3	5.1	0.0	0.0	0.0
72.5°	3514.0	342.2	44.5	20.5	15.4	10.3	8.6	3.4	0.0	0.0	0.0
75°	1332.7	164.2	27.4	13.7	12.0	8.6	5.1	1.7	0.0	0.0	0.0
77.5°	361.0	80.4	15.4	10.3	8.6	5.1	3.4	0.0	0.0	0.0	0.0
80°	94.1	37.6	10.3	6.8	5.1	3.4	0.0	0.0	0.0	0.0	0.0
82.5°	32.5	17.1	5.1	5.1	3.4	1.7	0.0	0.0	0.0	0.0	0.0
85°	13.7	6.8	3.4	3.4	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.1	1.7	1.7	1.7	1.7	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

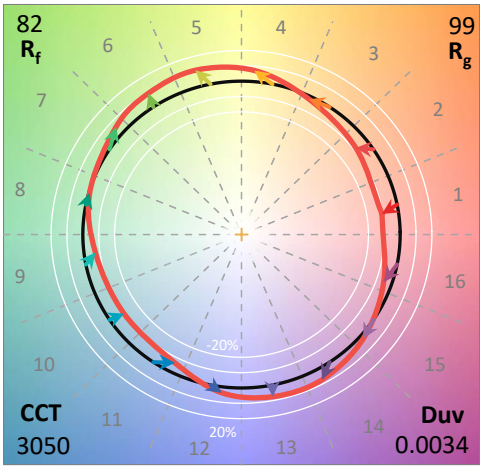
Test Information

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

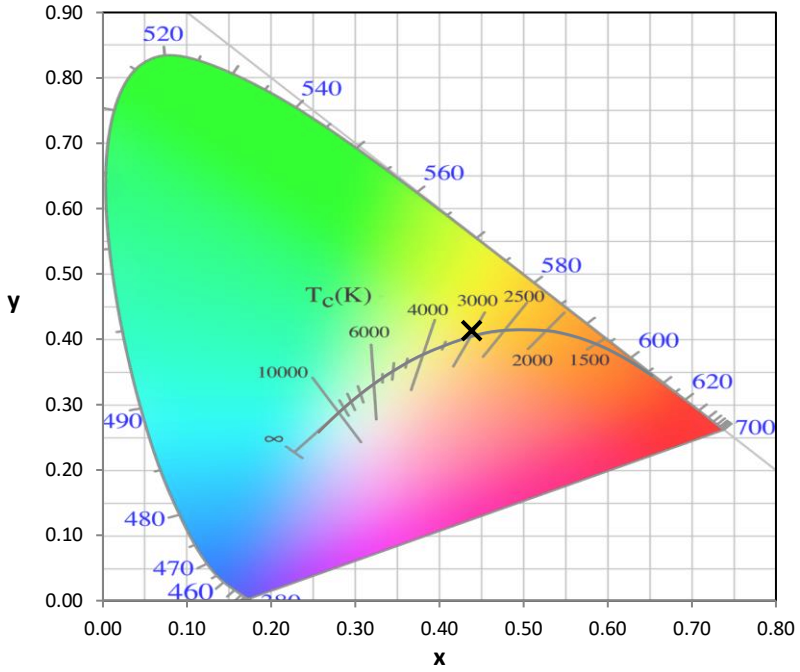
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

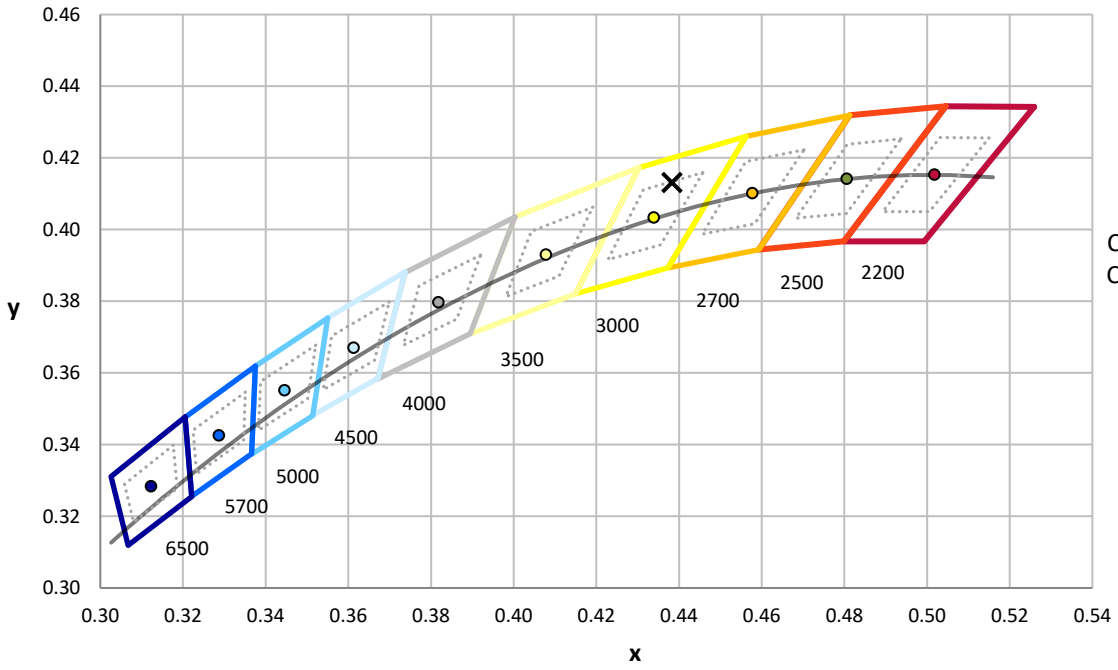
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

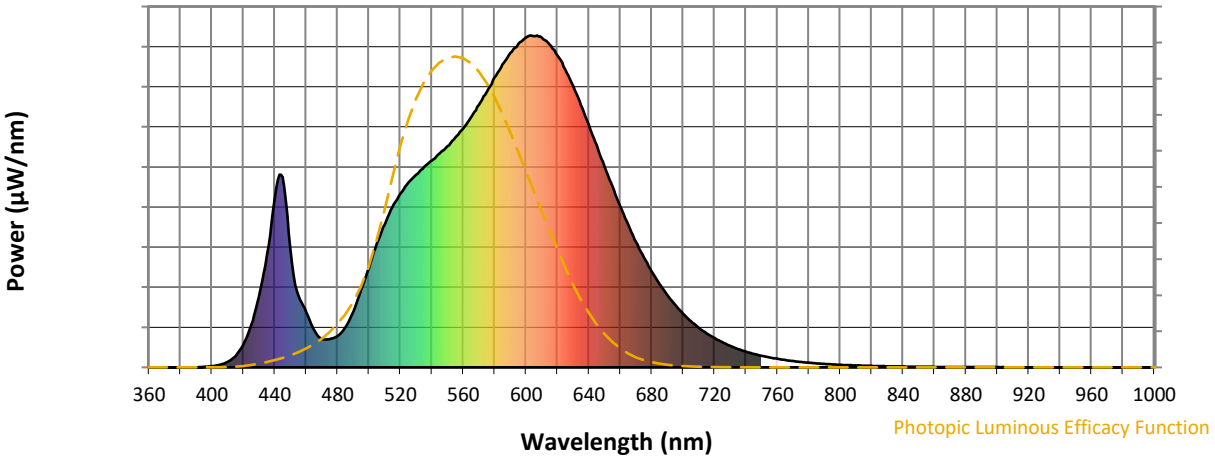


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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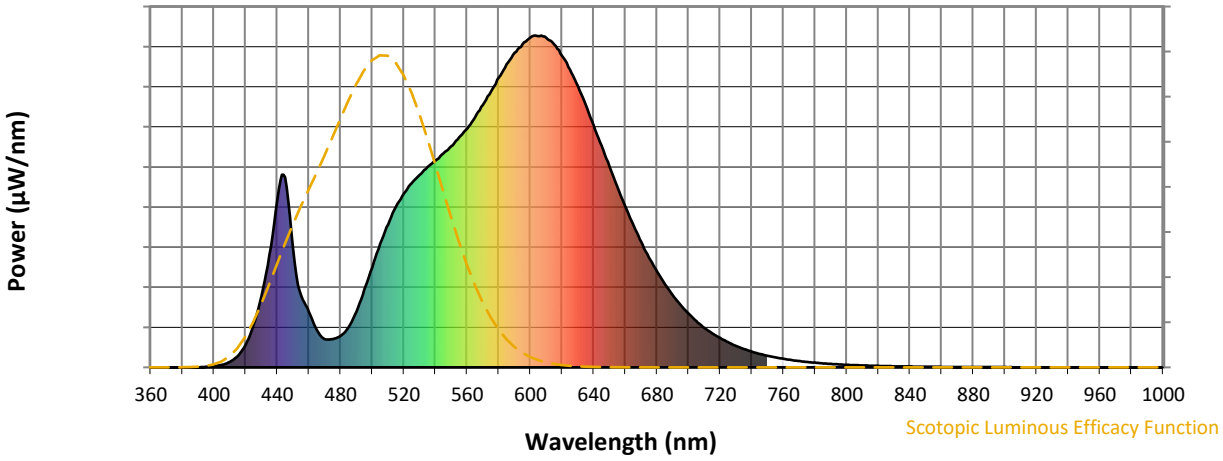
Scotopic Flux vs. Wavelength



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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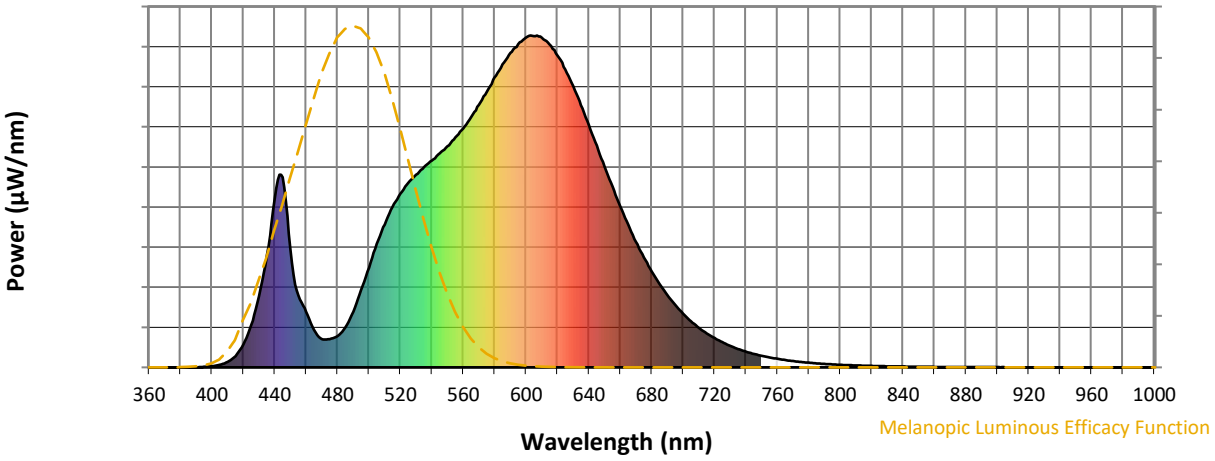
Melanopic Flux vs. Wavelength



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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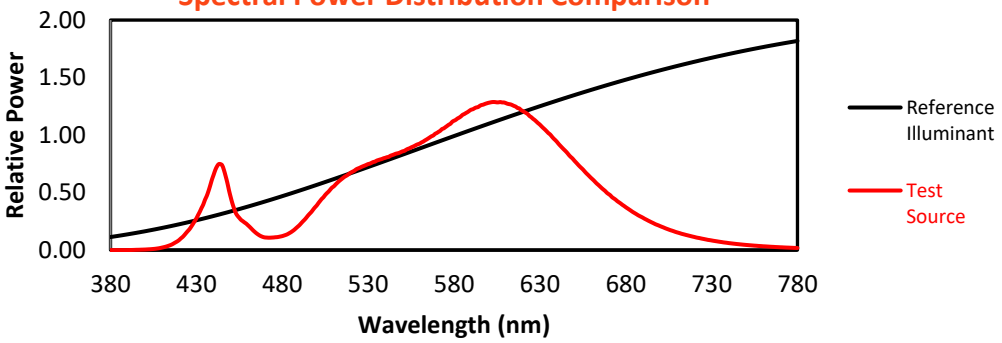
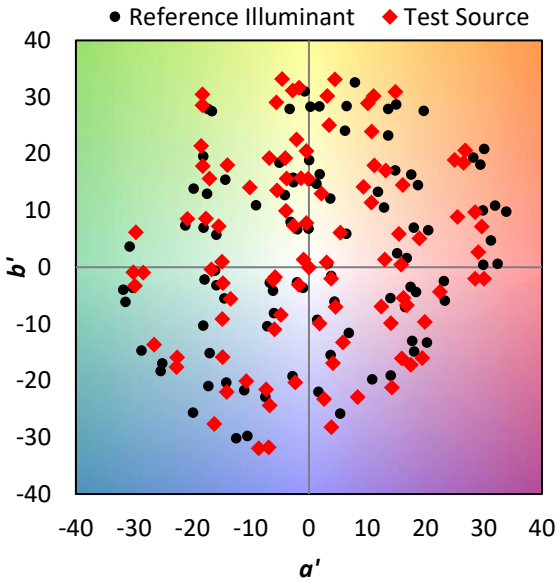
Summary

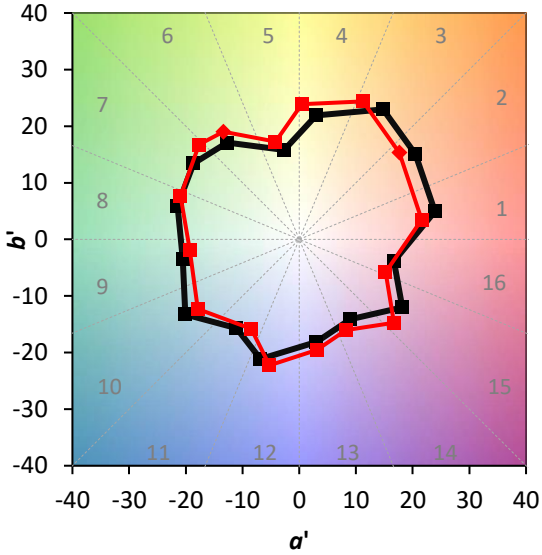
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

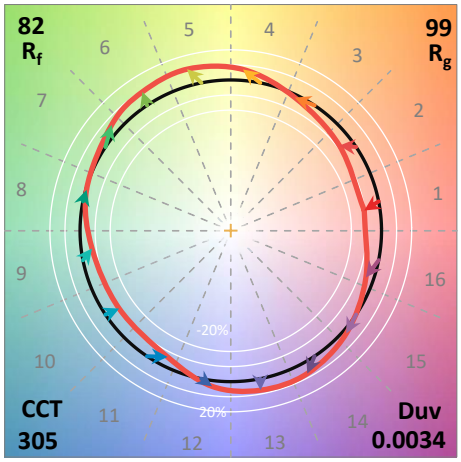
Spectral Power Distribution Comparison

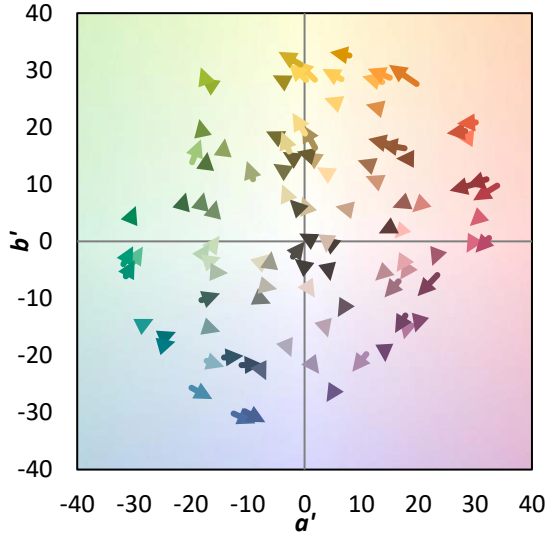


Color Vector Graphics









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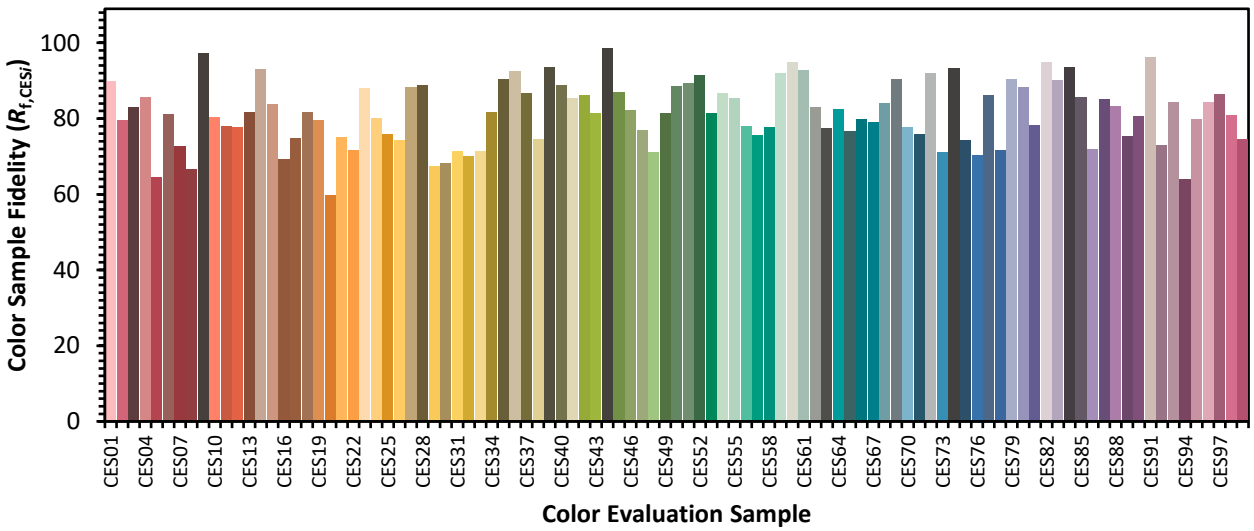
Individual Sample Fidelity Index ($R_{f,i}$)

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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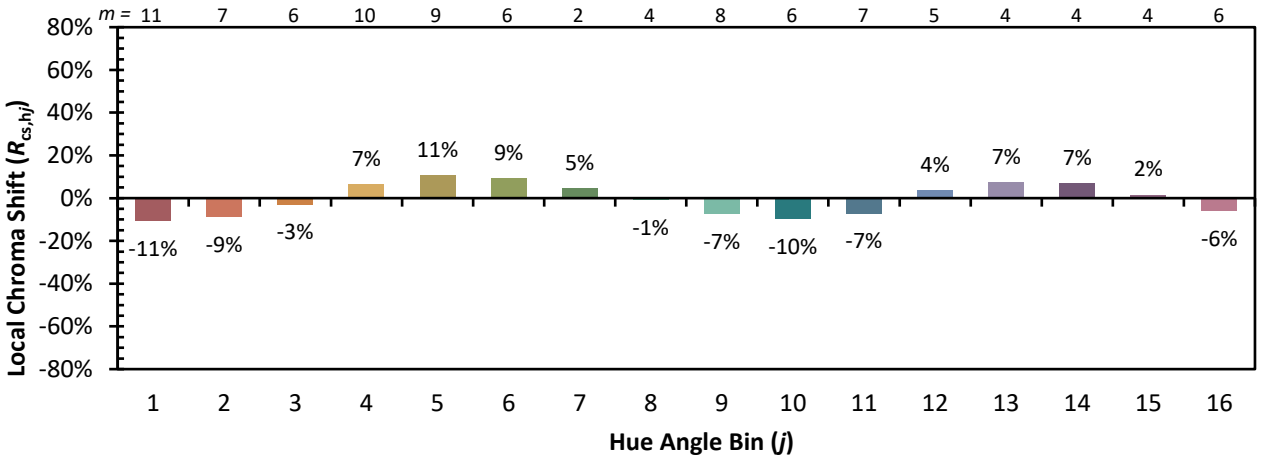
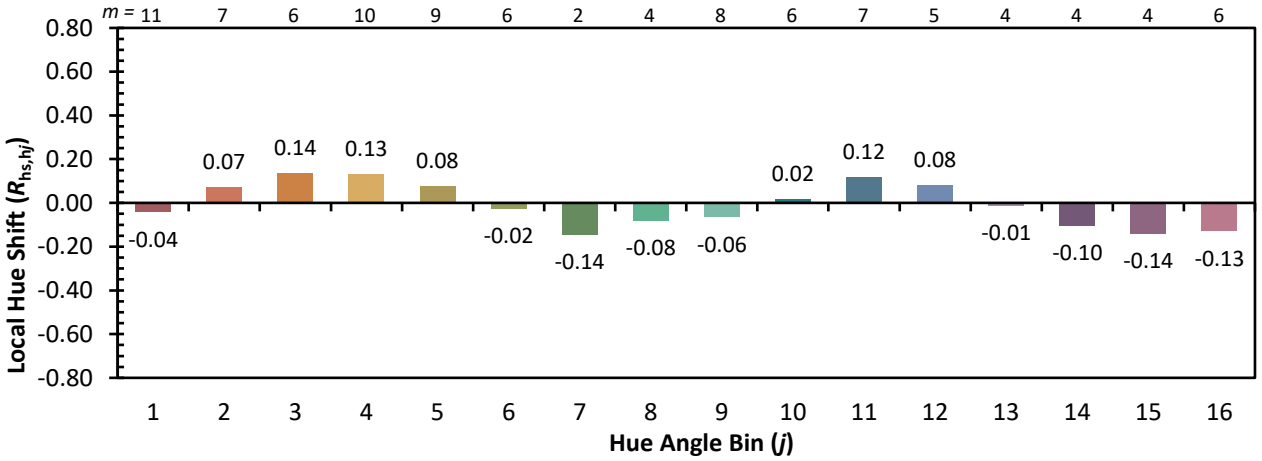
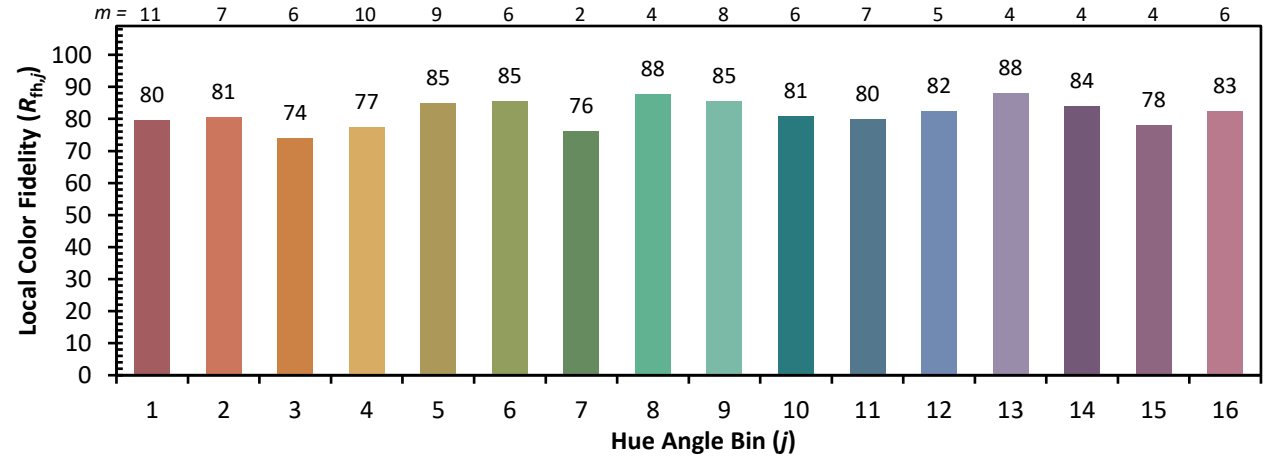
Color Rendition by Hue-Angle Bin







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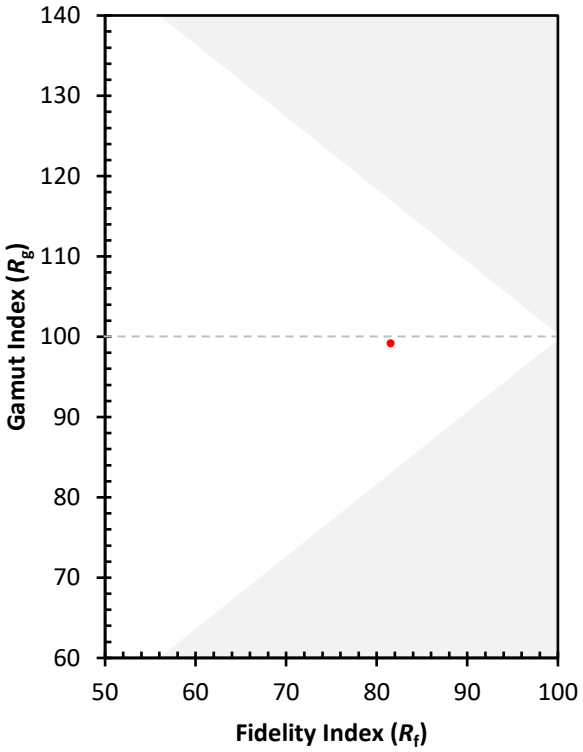
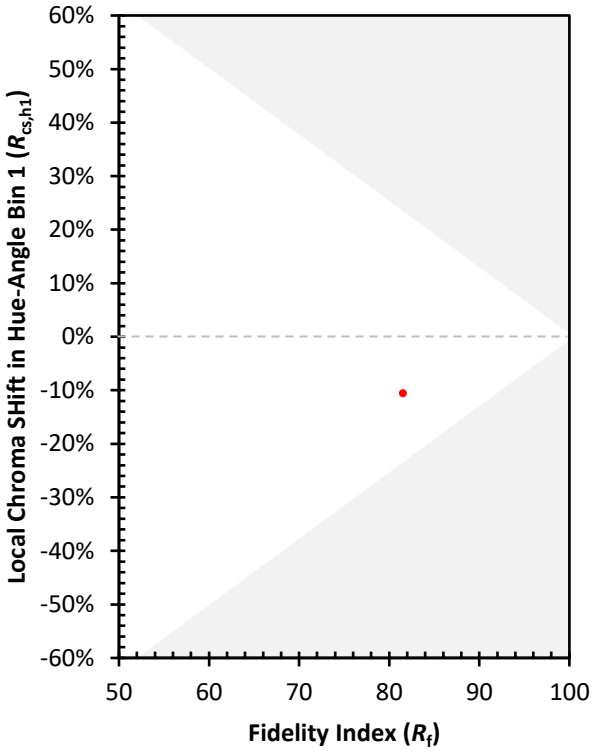
Measure Comparisons





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