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: P636510

Luminaire Tested: GWS-SA3F-830-U-T2-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:	P636510
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-22)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3F-830-U-T2-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	14549.2 lumens
Efficiency:	N/A
Efficacy:	79.4 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G3

Input Watts (W):	183.2
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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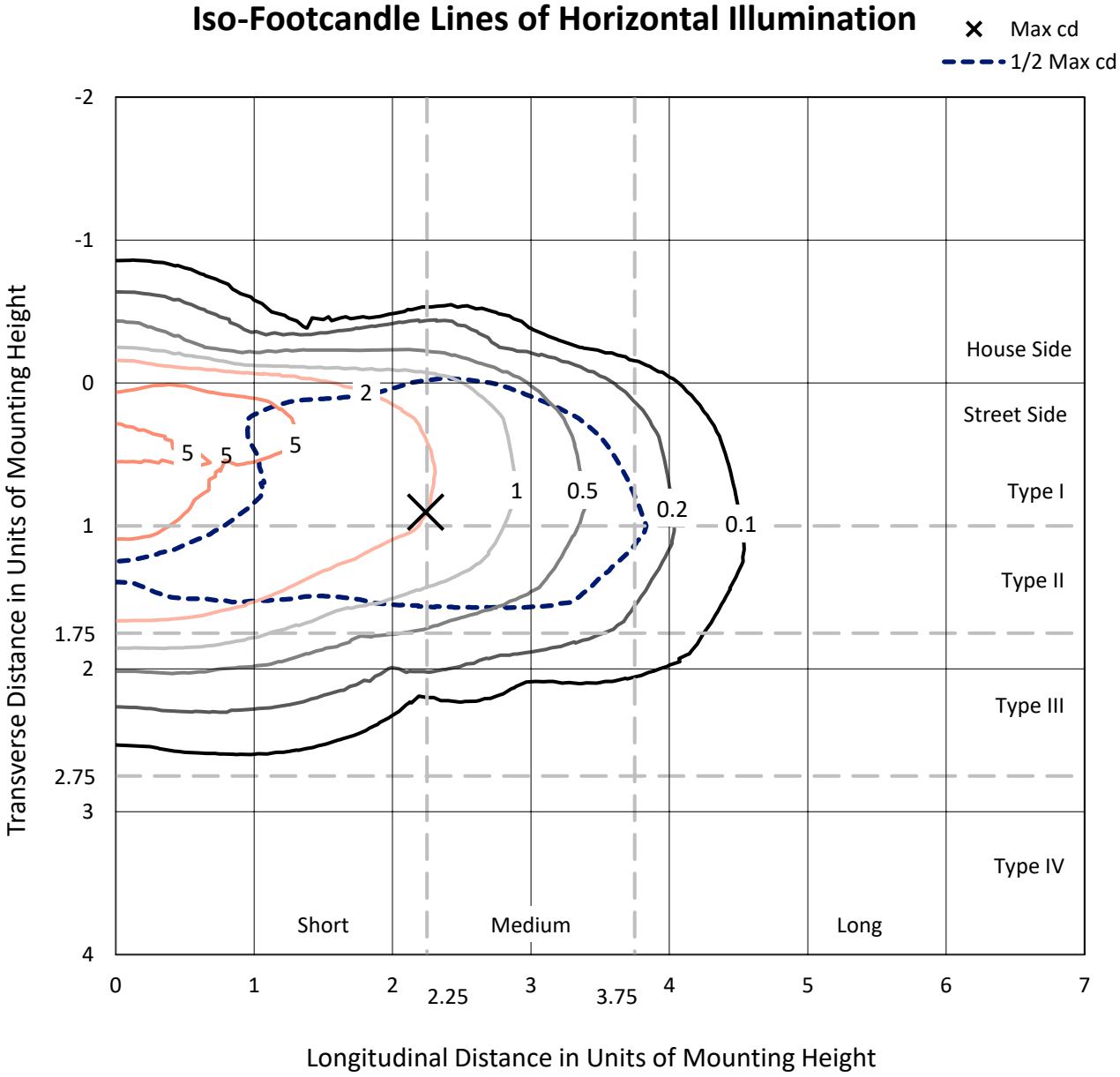
REPORT NUMBER: P636510
CATALOG NUMBER: GWS-SA3F-830-U-T2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 6.8 fc
Type II - Short - N/A

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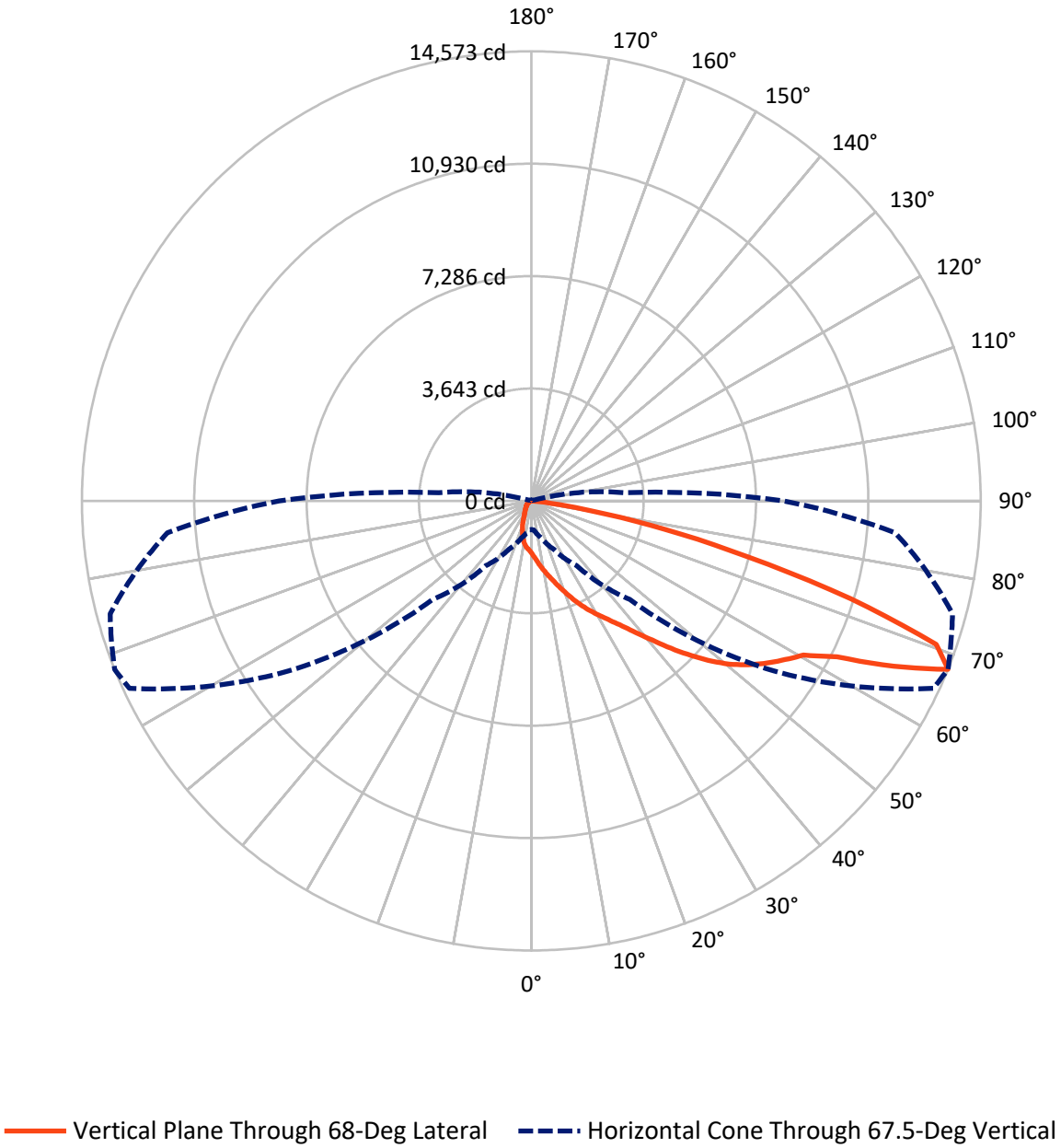
Luminous Intensity Polar Plot



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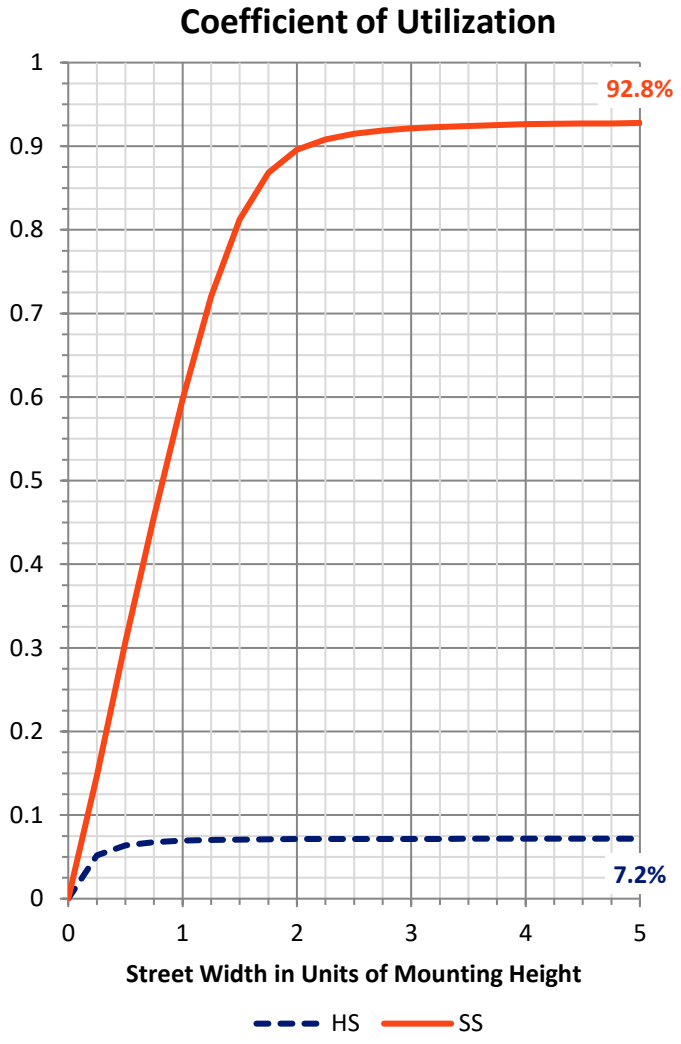
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1050.6	0.0	1050.6
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	13498.6	0.0	13498.6
	% Fixture	92.8	0.0	92.8
Total	Lumens	14549.2	0.0	14549.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.1	1.1
10°-20°	474.2	3.3
20°-30°	814.9	5.6
30°-40°	1416.9	9.7
40°-50°	2472.3	17.0
50°-60°	3728.9	25.6
60°-70°	3739.1	25.7
70°-80°	1649.7	11.3
80°-90°	88.1	0.6
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°	14549.2	100.0
0°-180°	14549.2	100.0



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REPORT NUMBER: P636510
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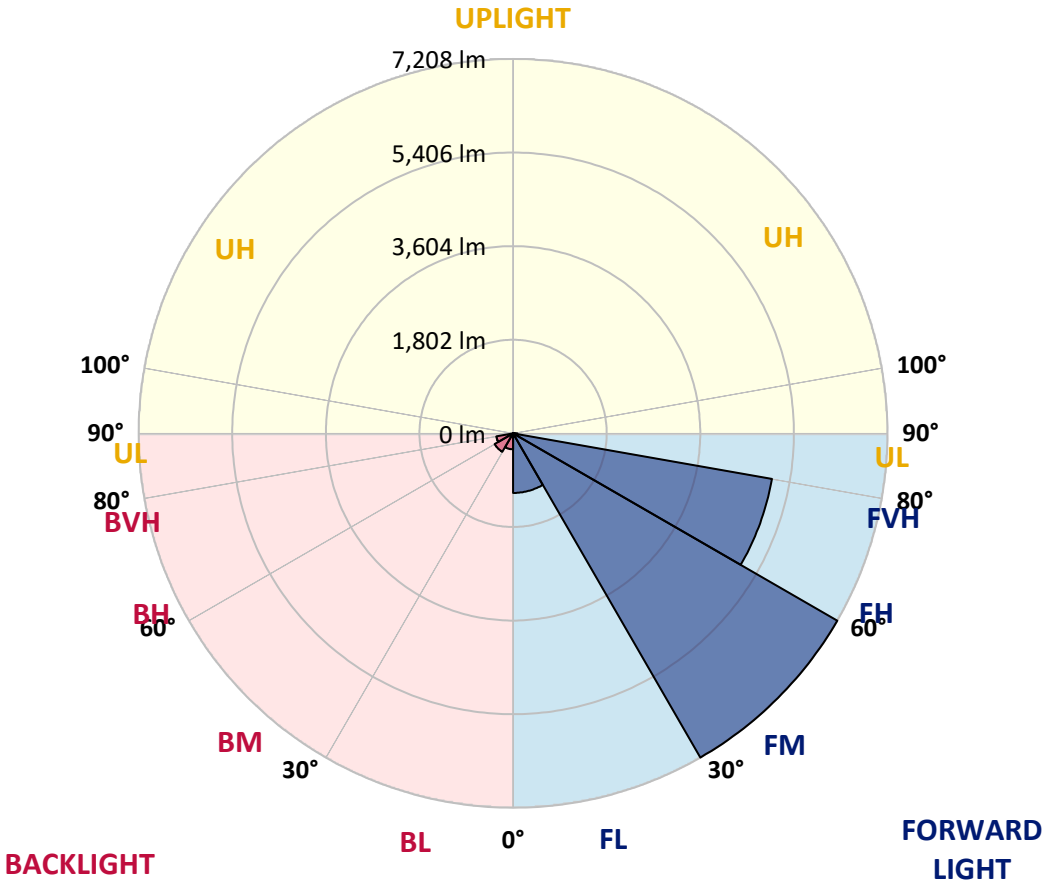
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1146.9	7.9			
FM	(30°-60°)	7207.6	49.5			
FH	(60°-80°)	5060.9	34.8			G3/7500
FVH	(80°-90°)	83.1	0.6			G1/100
BL	(0°-30°)	307.4	2.1	B1/500		
BM	(30°-60°)	410.4	2.8	B1/1000		
BH	(60°-80°)	327.9	2.3	B1/500		G1/500
BVH	(80°-90°)	5.0	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-G3
Type II Short



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Scaled Data Report

REPORT NUMBER: P636510
CATALOG NUMBER: GWS-SA3F-830-U-T2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	1693.2	1693.2	1693.2	1693.2	1693.2	1693.2	1693.2	1693.2	*1693.2*	1693.2	1693.2
2.5°	1971.6	1984.2	1971.6	1974.4	1938.2	1921.5	1885.3	1835.2	*1822.7*	1790.6	1741.9
5°	2212.5	2223.7	2211.1	2208.3	2166.6	2135.9	2076.1	1989.7	*1964.7*	1902.0	1805.9
7.5°	2343.4	2350.4	2354.5	2361.5	2346.2	2321.1	2266.8	2159.6	*2133.2*	2031.5	1896.4
10°	2357.3	2362.9	2383.8	2425.6	2456.2	2471.5	2440.9	2342.0	*2300.2*	2201.4	2007.8
12.5°	2318.3	2326.7	2360.1	2429.7	2514.7	2592.6	2612.1	2525.8	*2488.2*	2361.5	2138.7
15°	2266.8	2273.8	2319.7	2414.4	2542.5	2685.9	2766.7	2729.1	*2687.3*	2555.1	2283.5
17.5°	2187.5	2197.2	2261.3	2389.4	2555.1	2759.7	2933.8	2946.3	*2917.1*	2773.7	2443.7
20°	2142.9	2149.9	2207.0	2339.2	2546.7	2814.0	3089.7	3208.1	*3176.1*	3025.7	2627.5
22.5°	2180.5	2186.1	2223.7	2326.7	2518.8	2844.7	3234.5	3469.9	*3451.8*	3295.8	2821.0
25°	2378.2	2396.3	2374.0	2392.1	2531.4	2861.4	3351.5	3731.6	*3735.8*	3578.5	3021.5
27.5°	2779.2	2755.6	2702.6	2612.1	2628.8	2905.9	3451.8	3978.1	*4014.3*	3854.2	3199.7
30°	3187.2	3173.3	3141.3	3000.6	2883.7	3004.8	3536.7	4230.1	*4287.2*	4125.7	3358.5
32.5°	3645.3	3659.2	3602.1	3433.7	3234.5	3205.3	3624.4	4469.6	*4576.8*	4433.4	3545.0
35°	4192.5	4196.7	4083.9	3897.3	3671.8	3536.7	3781.8	4734.2	*4931.9*	4826.1	3794.3
37.5°	4725.8	4750.9	4689.6	4395.8	4195.3	3948.8	4042.1	5073.9	*5352.4*	5310.6	4107.6
40°	5197.8	5236.8	5217.3	4933.3	4670.1	4462.6	4445.9	5472.1	*5860.6*	5907.9	4521.1
42.5°	5573.8	5598.8	5614.2	5412.3	5179.7	5062.8	4944.4	5934.4	*6460.7*	6654.3	5028.0
45°	5970.6	5979.0	6011.0	5874.5	5671.2	5681.0	5533.4	6495.5	*7092.9*	7481.4	5610.0
47.5°	6476.0	6503.9	6488.6	6345.2	6161.4	6271.4	6141.9	7073.4	*7716.7*	8364.1	6205.9
50°	7091.5	7120.7	7106.8	6939.7	6735.0	6781.0	6700.2	7634.5	*8318.2*	9196.8	6701.6
52.5°	7409.0	7432.6	7605.3	7680.5	7573.3	7280.9	7176.4	8251.4	*8826.4*	9881.9	7156.9
55°	7255.8	7272.5	7648.4	7965.9	8358.6	8066.2	7655.4	8727.6	*9274.8*	10416.5	7495.3
57.5°	6620.9	6711.4	7222.4	7759.8	8585.5	8841.7	8432.4	9245.5	*9706.4*	10788.3	7828.1
60°	5319.0	5314.8	6047.2	7012.1	8142.7	9054.8	9529.6	9945.9	*10139.4*	11073.7	8273.6
62.5°	2939.4	2965.8	3940.5	5211.7	6911.9	8503.4	10352.5	11155.9	*11126.7*	11572.2	8971.2
65°	1463.4	1516.3	2045.4	2985.3	4599.1	7027.4	10494.5	13002.2	*12918.7*	12746.0	10412.4
67.5°	*928.7*	*949.6*	*1242.0*	*1734.9*	*2556.4*	*4516.9*	*9610.3*	*14379.3*	*14572.8*	*14138.4*	*11842.4*
70°	601.5	636.3	863.3	1186.3	1542.8	2328.1	7040.0	13486.8	*13930.9*	13985.3	10951.2
72.5°	327.2	352.3	551.4	846.6	1113.9	1164.0	3954.4	10121.3	*10835.6*	11863.2	8567.4
75°	186.6	204.7	302.2	575.1	817.3	708.7	1753.0	6775.4	*7230.7*	8478.3	6139.1
77.5°	112.8	128.1	169.9	279.9	512.4	473.4	662.8	4124.3	*4413.9*	5058.6	3222.0
80°	51.5	61.3	107.2	154.6	279.9	224.2	253.4	1922.9	*1985.6*	2076.1	1066.6
82.5°	23.7	27.8	48.7	91.9	158.7	129.5	97.5	444.2	*625.2*	591.8	271.5
85°	2.8	2.8	18.1	37.6	44.6	33.4	40.4	100.3	*126.7*	178.2	78.0
87.5°	0.0	0.0	1.4	1.4	2.8	4.2	8.4	12.5	*18.1*	29.2	19.5
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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REPORT NUMBER: P636510
CATALOG NUMBER: GWS-SA3F-830-U-T2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1693.2	1693.2	1693.2	1693.2	1693.2	1693.2	1693.2	1693.2	1693.2	1693.2	1693.2
2.5°	1719.6	1680.6	1645.8	1594.3	1559.5	1520.5	1494.0	1462.0	1449.5	1439.7	1425.8
5°	1758.6	1695.9	1611.0	1516.3	1438.3	1364.6	1296.3	1251.8	1212.8	1207.2	1187.7
7.5°	1822.7	1729.4	1585.9	1431.4	1299.1	1176.6	1080.5	1002.5	963.5	951.0	928.7
10°	1907.6	1779.5	1548.3	1311.6	1120.9	974.7	866.1	778.4	717.1	694.8	678.1
12.5°	2002.3	1825.4	1488.5	1164.0	946.8	779.7	641.9	548.6	509.6	495.7	483.2
15°	2110.9	1868.6	1393.8	1016.5	777.0	573.7	476.2	435.8	419.1	414.9	410.8
17.5°	2215.3	1896.4	1281.0	863.3	597.3	445.6	399.6	384.3	380.1	375.9	373.2
20°	2333.7	1915.9	1148.7	718.5	463.7	377.3	355.1	343.9	335.6	327.2	325.8
22.5°	2454.8	1915.9	1005.3	576.5	388.5	338.4	313.3	292.4	277.1	268.7	265.9
25°	2570.4	1889.5	863.3	460.9	342.5	300.8	268.7	245.1	224.2	214.4	211.6
27.5°	2652.5	1821.3	739.4	389.9	310.5	267.3	228.4	201.9	185.2	175.4	174.0
30°	2704.0	1719.6	625.2	348.1	282.7	232.5	193.5	171.3	158.7	151.8	149.0
32.5°	2743.0	1594.3	523.5	318.9	256.2	201.9	168.5	150.4	139.2	133.7	132.3
35°	2821.0	1475.9	448.4	292.4	228.4	176.8	147.6	133.7	125.3	118.4	117.0
37.5°	2929.6	1377.1	388.5	268.7	201.9	157.3	133.7	121.1	114.2	107.2	105.8
40°	3089.7	1314.4	343.9	245.1	178.2	142.0	122.5	111.4	101.6	94.7	93.3
42.5°	3336.2	1285.2	314.7	221.4	157.3	128.1	112.8	98.9	89.1	82.2	80.8
45°	3630.0	1300.5	289.6	197.7	143.4	118.4	100.3	86.3	76.6	69.6	68.2
47.5°	3944.7	1354.8	268.7	175.4	129.5	108.6	89.1	73.8	65.4	58.5	57.1
50°	4273.3	1443.9	250.6	154.6	118.4	97.5	76.6	64.1	55.7	50.1	48.7
52.5°	4558.7	1565.1	232.5	139.2	108.6	86.3	66.8	55.7	47.3	41.8	40.4
55°	4831.6	1679.2	218.6	125.3	97.5	75.2	58.5	47.3	40.4	34.8	33.4
57.5°	5128.2	1800.4	201.9	112.8	87.7	66.8	51.5	40.4	34.8	29.2	27.8
60°	5559.8	1980.0	176.8	103.0	76.6	58.5	44.6	36.2	30.6	23.7	22.3
62.5°	6182.3	2307.2	149.0	89.1	65.4	50.1	37.6	30.6	25.1	19.5	16.7
65°	7346.3	2864.2	122.5	73.8	52.9	41.8	32.0	25.1	19.5	13.9	12.5
67.5°	*8184.5*	*3009.0*	*98.9*	*59.9*	*43.2*	*32.0*	*26.5*	*19.5*	*13.9*	*9.7*	*8.4*
70°	7155.5	2161.0	76.6	48.7	36.2	25.1	20.9	15.3	9.7	7.0	5.6
72.5°	5391.4	1411.9	57.1	37.6	27.8	20.9	15.3	12.5	8.4	5.6	4.2
75°	3799.9	815.9	41.8	27.8	19.5	15.3	12.5	9.7	7.0	4.2	4.2
77.5°	1948.0	337.0	29.2	19.5	13.9	9.7	8.4	5.6	5.6	4.2	2.8
80°	591.8	111.4	16.7	12.5	9.7	7.0	4.2	4.2	4.2	2.8	1.4
82.5°	135.1	36.2	9.7	9.7	7.0	5.6	4.2	1.4	1.4	0.0	0.0
85°	34.8	11.1	8.4	7.0	7.0	5.6	2.8	1.4	0.0	0.0	0.0
87.5°	12.5	7.0	7.0	7.0	5.6	4.2	2.8	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

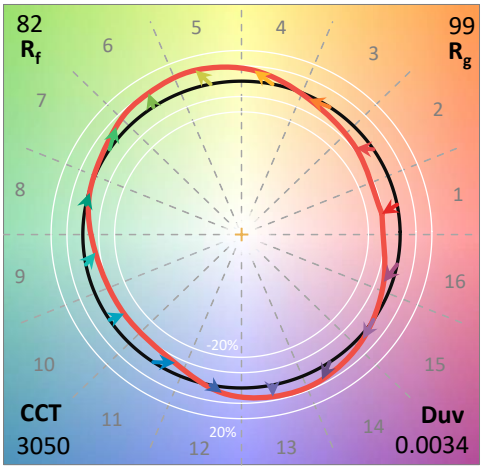
Test Information

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

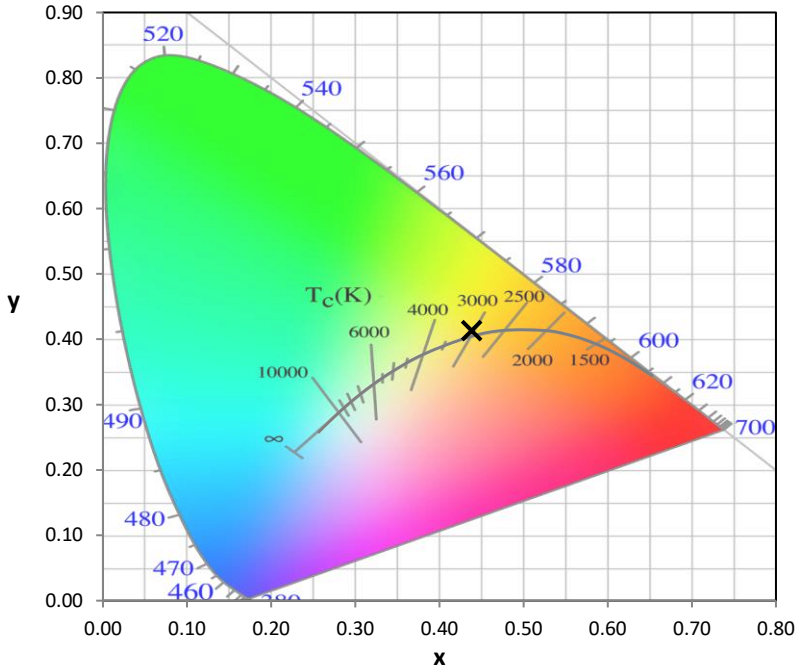
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

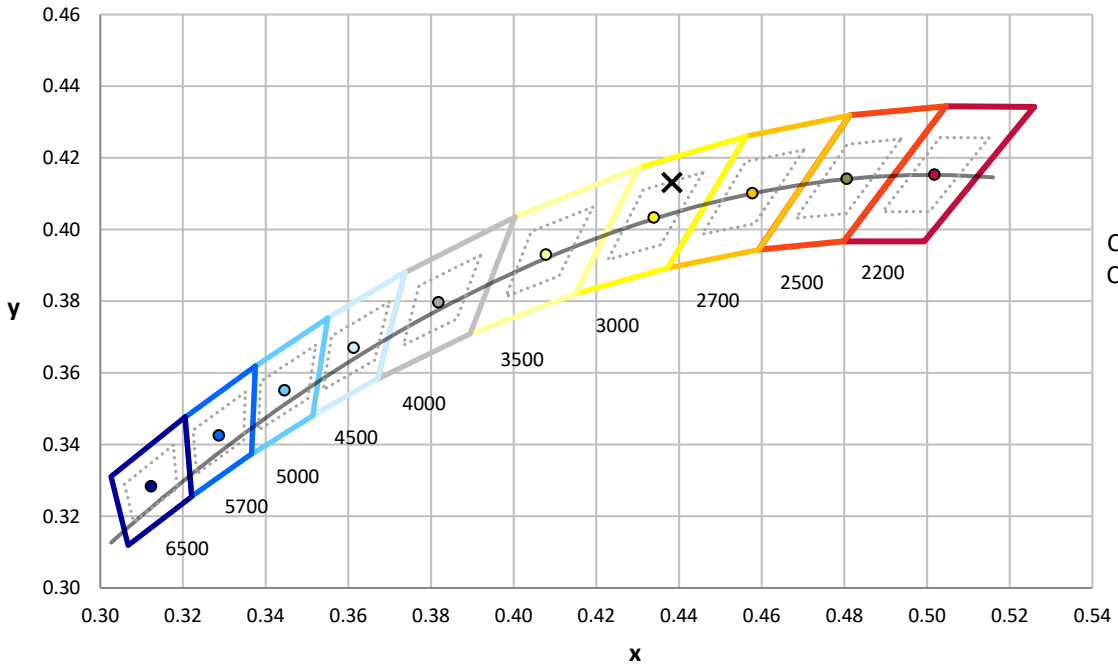
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

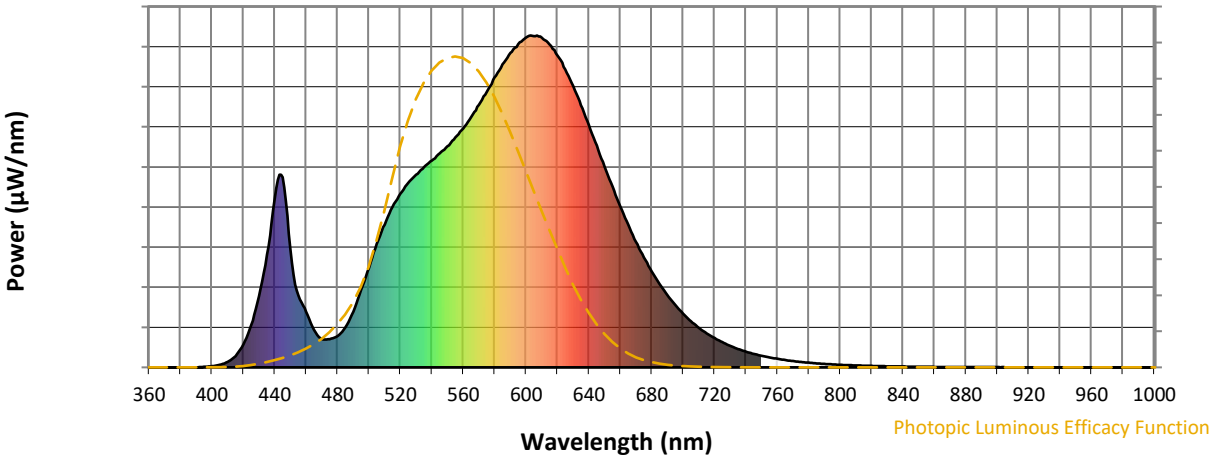


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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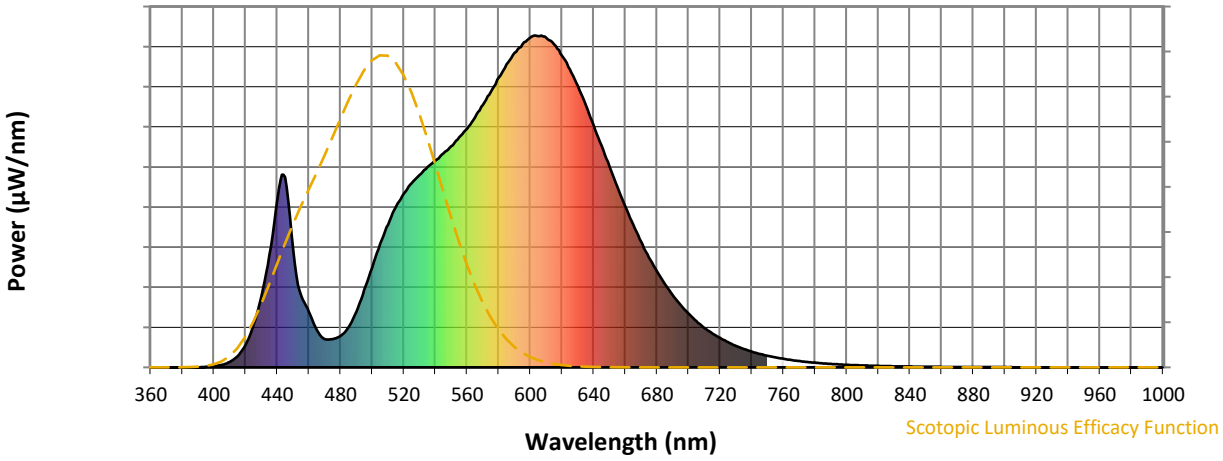
Scotopic Flux vs. Wavelength



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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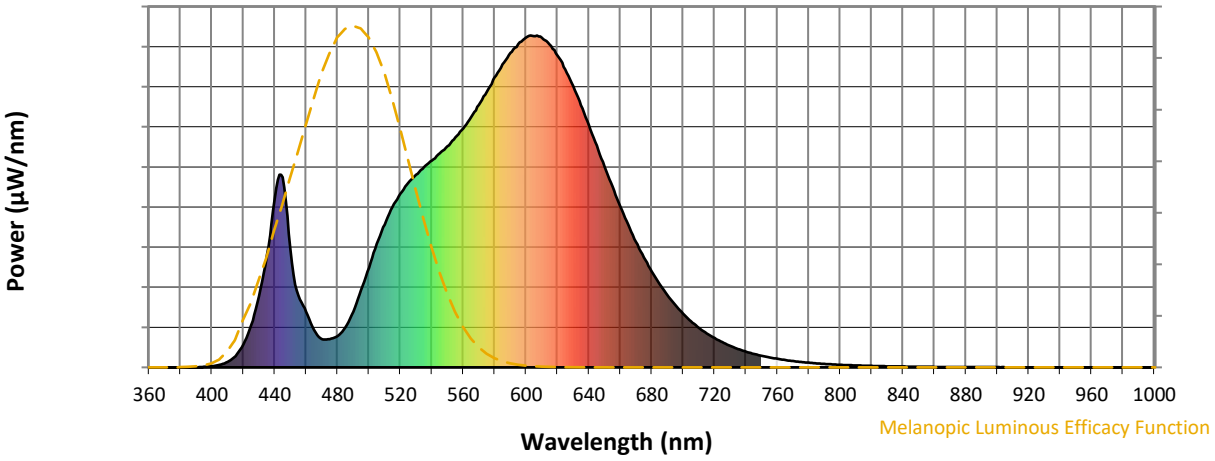
Melanopic Flux vs. Wavelength



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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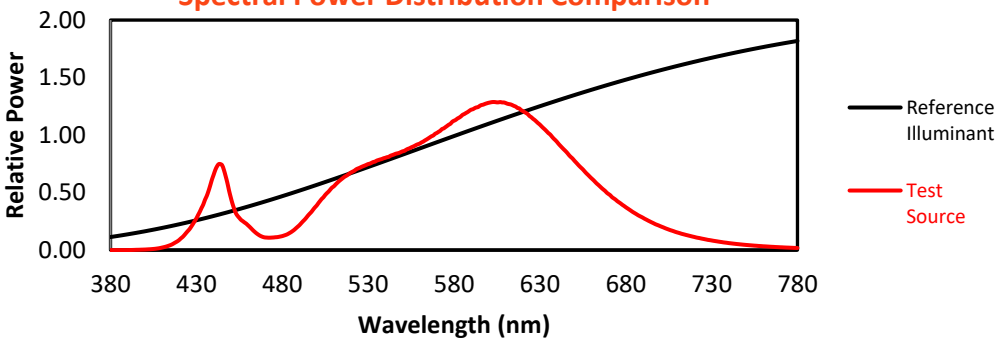
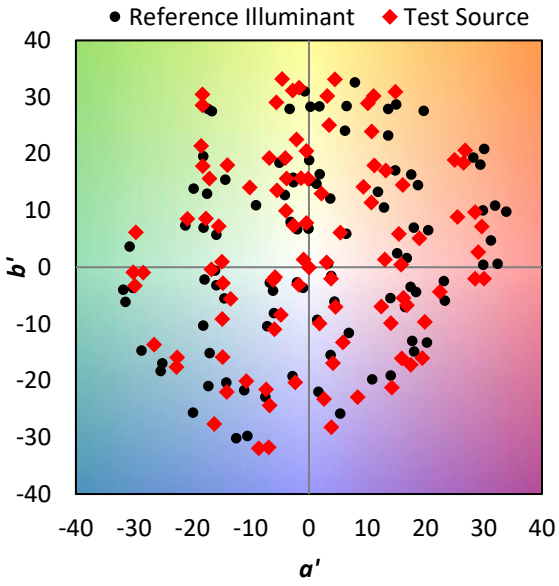
Summary

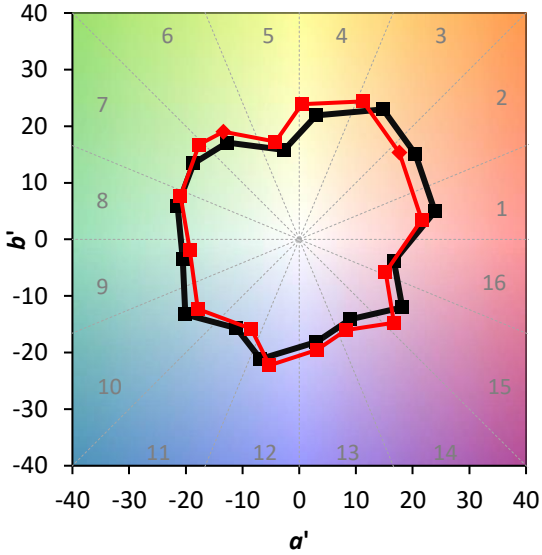
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

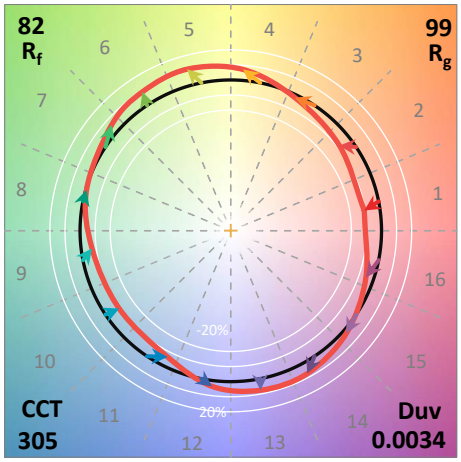
Spectral Power Distribution Comparison

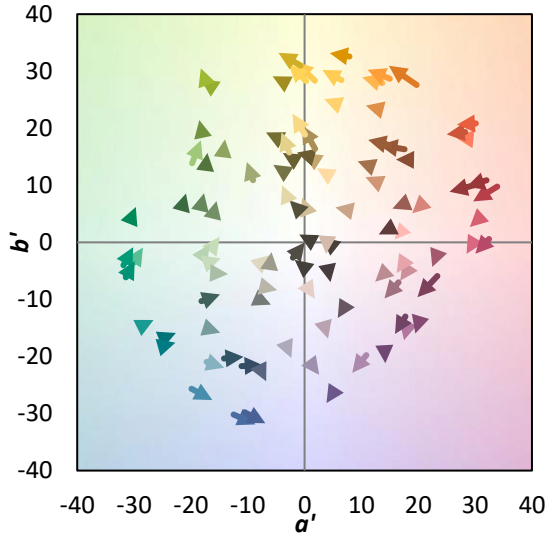


Color Vector Graphics









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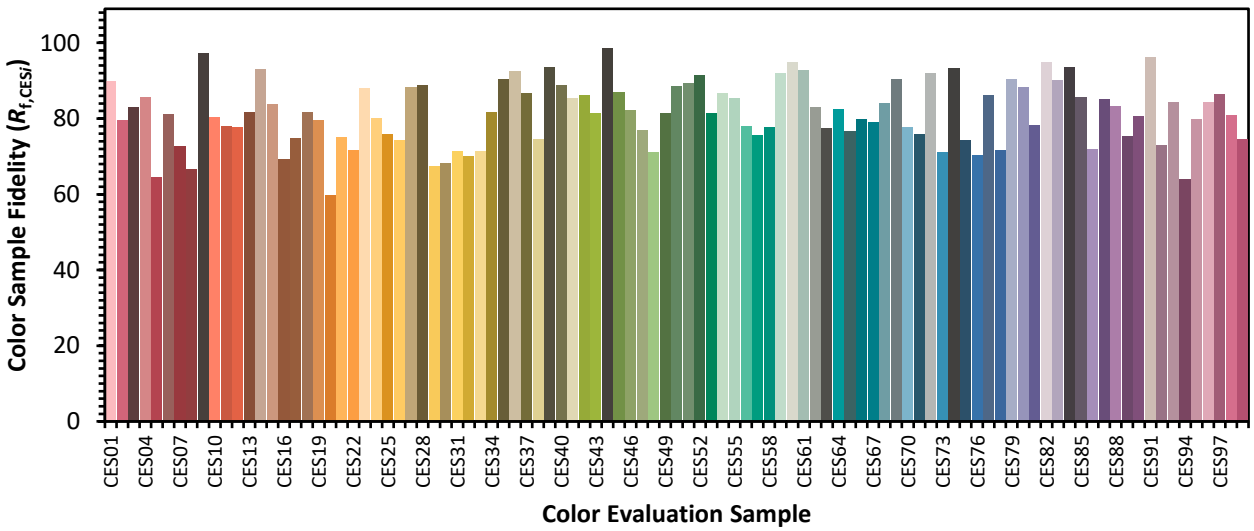
Individual Sample Fidelity Index ($R_{f,i}$)

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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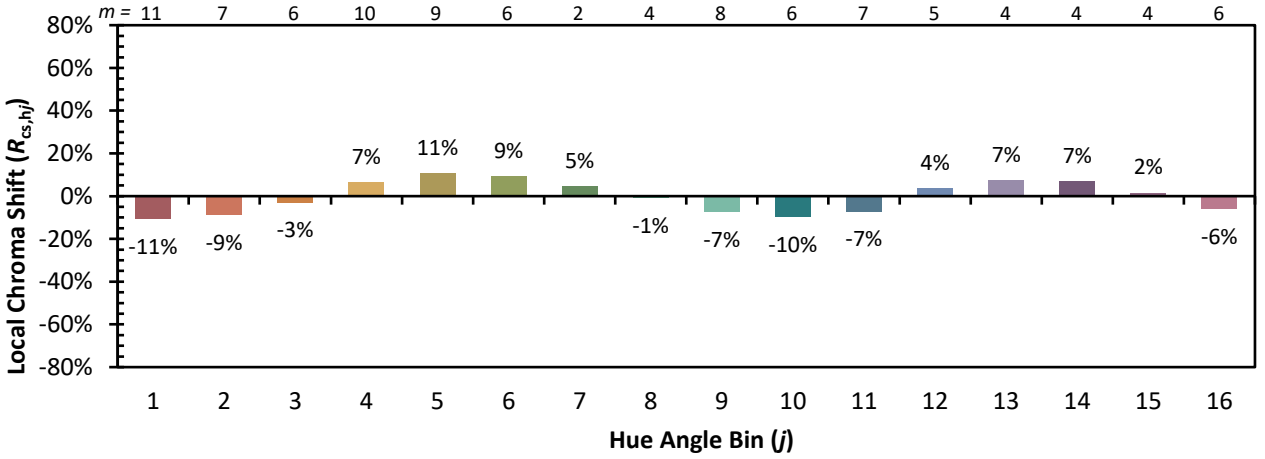
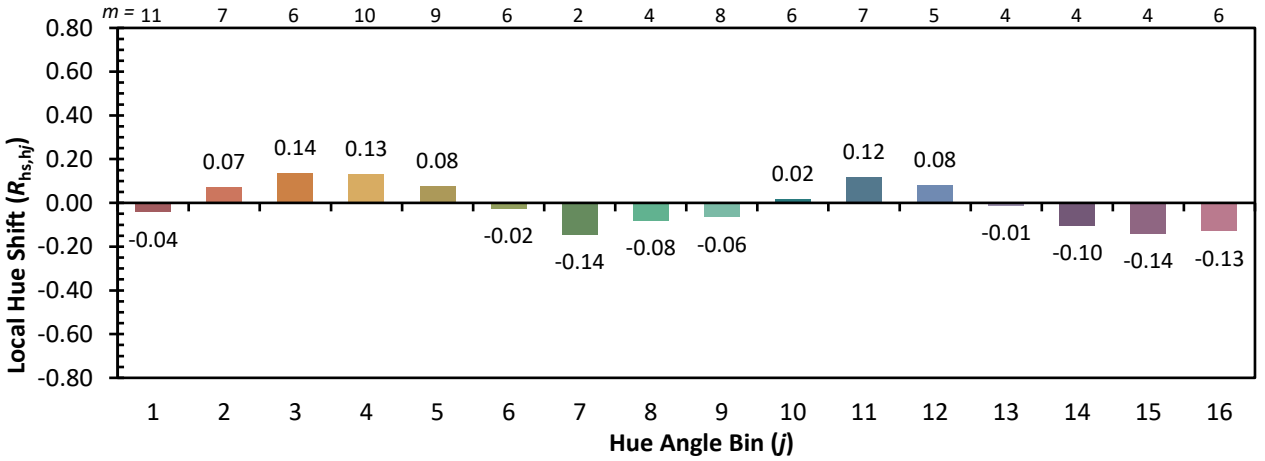
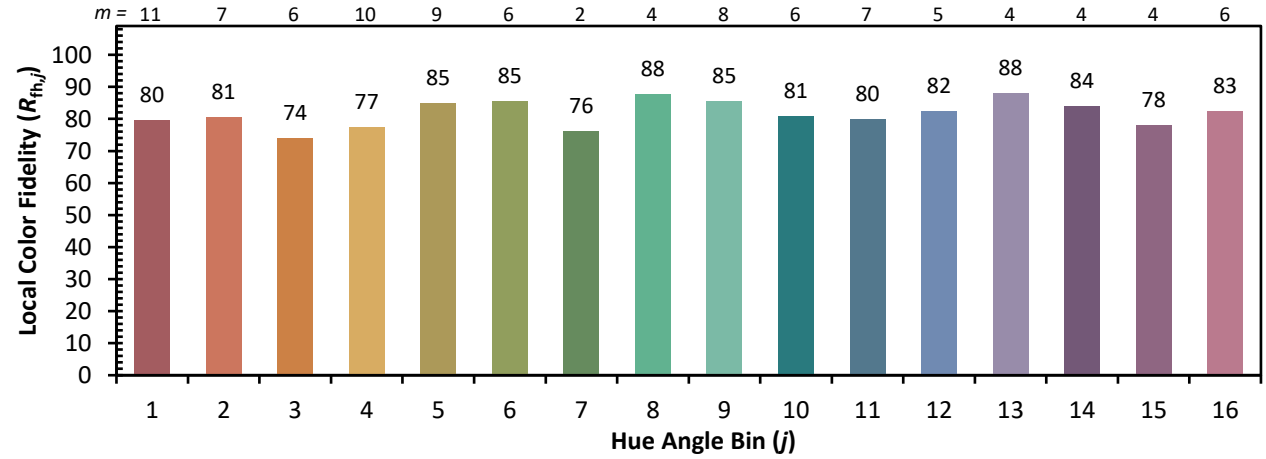
Color Rendition by Hue-Angle Bin







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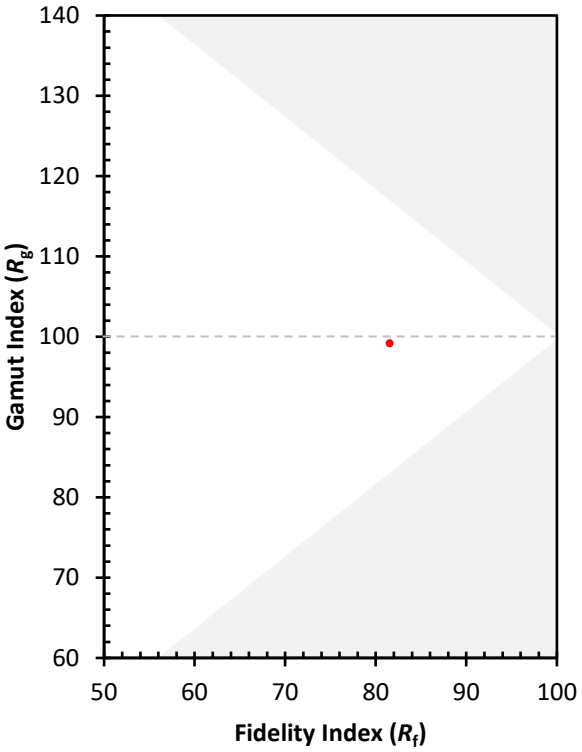
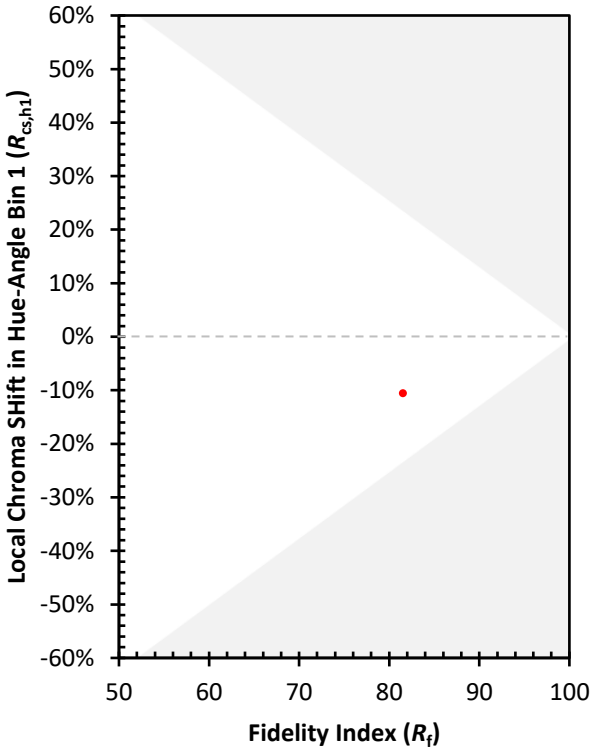
Measure Comparisons





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