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: P636522

Luminaire Tested: GWS-SA3F-830-U-T3R-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:	P636522
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-18)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3F-830-U-T3R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	15205 lumens
Efficiency:	N/A
Efficacy:	83.0 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B2 - 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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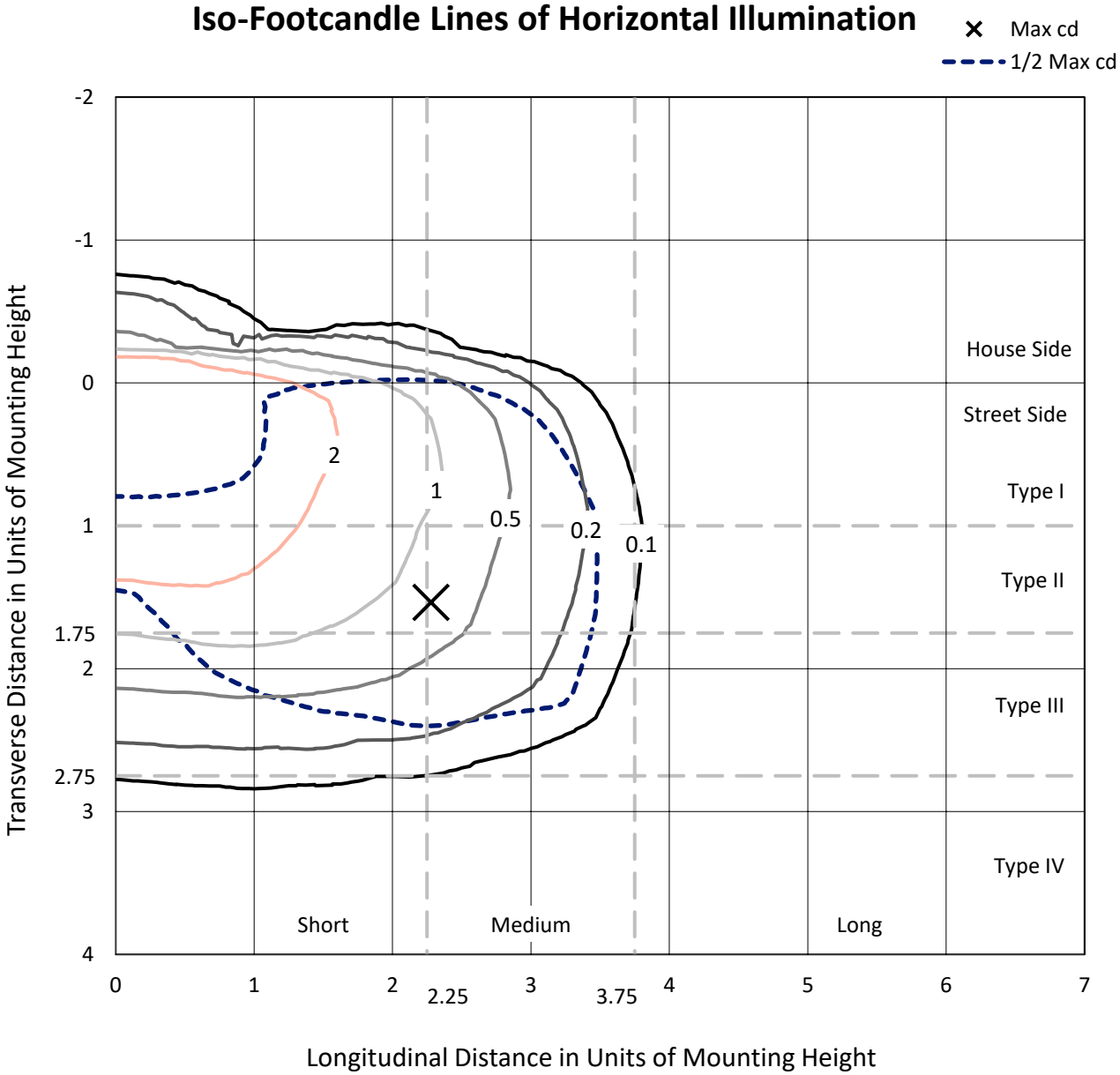
REPORT NUMBER: P636522
CATALOG NUMBER: GWS-SA3F-830-U-T3R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type III - Medium - N/A

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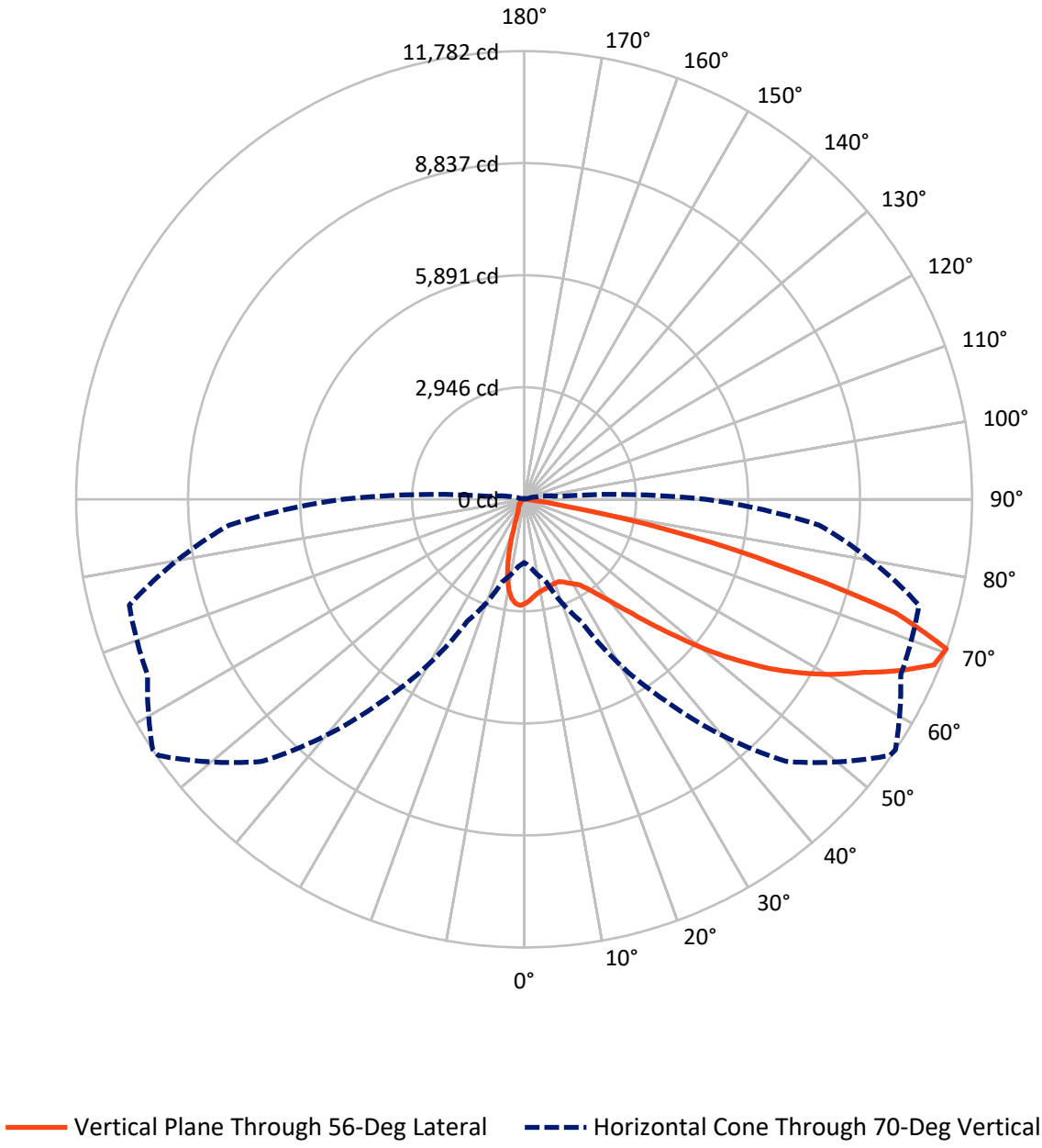
Luminous Intensity Polar Plot



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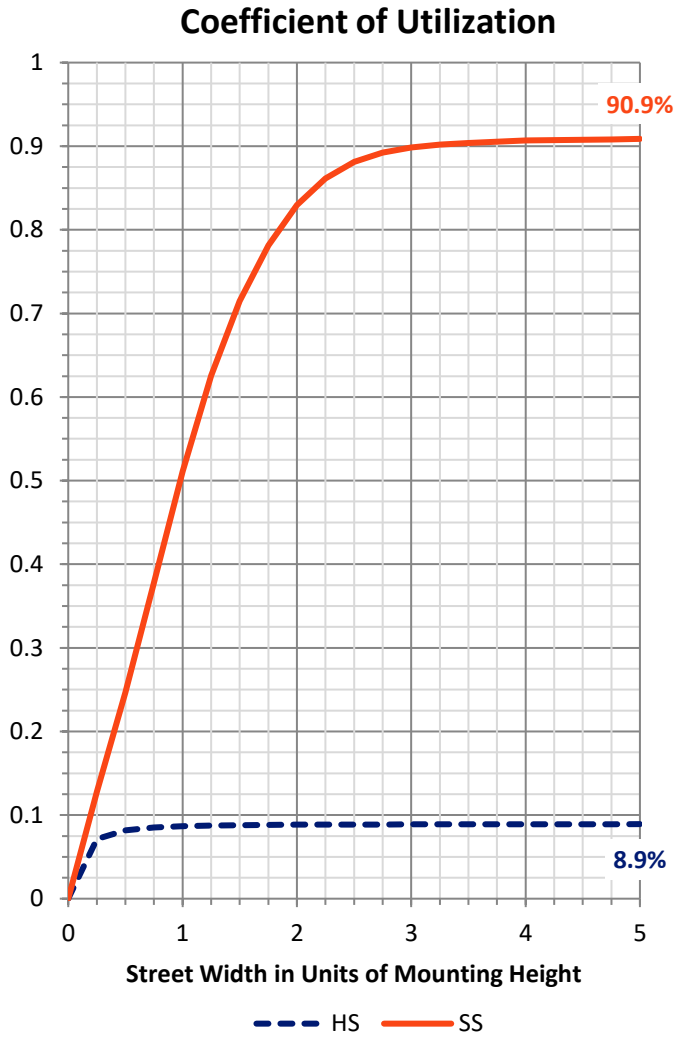
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1365.7	0.0	1365.7
	% Fixture	9.0	0.0	9.0
Street Side	Lumens	13839.3	0.0	13839.3
	% Fixture	91.0	0.0	91.0
Total	Lumens	15205.0	0.0	15205.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.4	1.5
10°-20°	529.4	3.5
20°-30°	838.6	5.5
30°-40°	1446.2	9.5
40°-50°	2442.1	16.1
50°-60°	3588.2	23.6
60°-70°	4254.0	28.0
70°-80°	1814.1	11.9
80°-90°	57.0	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°	15205.0	100.0
0°-180°	15205.0	100.0



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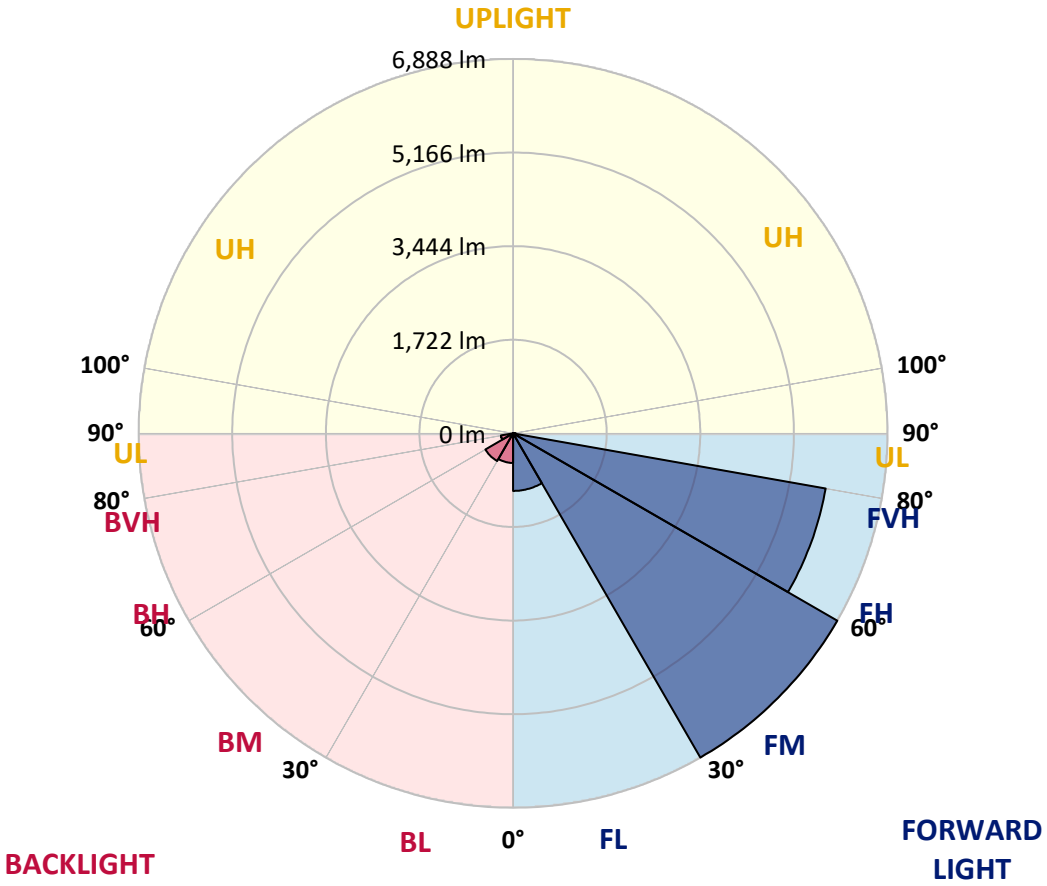
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1059.5	7.0			
FM	(30°-60°)	6888.3	45.3			
FH	(60°-80°)	5840.3	38.4			G3/7500
FVH	(80°-90°)	51.2	0.3			G1/100
BL	(0°-30°)	543.9	3.6	B2/1000		
BM	(30°-60°)	588.2	3.9	B1/1000		
BH	(60°-80°)	227.8	1.5	B1/500		G1/500
BVH	(80°-90°)	5.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
Type III Medium



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REPORT NUMBER: P636522
CATALOG NUMBER: GWS-SA3F-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6
2.5°	2552.2	2548.1	2550.9	2571.7	2610.7	2628.8	2659.5	2665.0	2690.1	2722.1	2734.7
5°	2386.6	2372.6	2379.6	2408.8	2453.4	2503.5	2560.6	2575.9	2638.6	2709.6	2762.5
7.5°	2234.8	2219.5	2236.2	2282.1	2344.8	2399.1	2484.0	2493.8	2594.0	2719.3	2815.4
10°	1996.7	2000.9	2034.3	2115.0	2211.1	2323.9	2438.1	2452.0	2575.9	2751.4	2900.3
12.5°	1814.3	1804.5	1840.7	1932.6	2067.7	2232.0	2403.3	2421.4	2577.3	2800.1	3009.0
15°	1729.3	1726.6	1741.9	1808.7	1939.6	2133.1	2371.2	2394.9	2595.4	2844.7	3112.0
17.5°	1732.1	1728.0	1726.6	1765.5	1863.0	2059.3	2336.4	2367.1	2610.7	2893.4	3220.6
20°	1853.3	1833.8	1799.0	1780.9	1839.3	2012.0	2312.8	2347.6	2633.0	2944.9	3336.2
22.5°	2106.7	2113.6	2020.4	1922.9	1895.0	2017.6	2310.0	2350.4	2681.7	3025.7	3478.2
25°	2613.5	2602.4	2429.7	2211.1	2059.3	2081.6	2358.7	2407.4	2777.8	3141.2	3611.9
27.5°	3248.4	3258.2	3021.5	2673.4	2355.9	2213.9	2447.8	2496.6	2889.2	3213.6	3701.0
30°	3940.5	3930.7	3677.3	3291.6	2776.4	2433.9	2536.9	2580.1	2944.9	3252.6	3792.9
32.5°	4594.9	4572.6	4322.0	3918.2	3312.5	2780.6	2659.5	2684.5	3018.7	3337.6	3916.8
35°	5153.2	5151.8	4933.2	4503.0	3863.9	3215.0	2869.7	2890.6	3156.5	3472.6	4099.2
37.5°	5729.7	5710.2	5465.1	5072.5	4430.6	3691.2	3191.4	3183.0	3373.8	3671.7	4323.4
40°	6203.1	6190.6	6002.6	5625.3	5019.6	4217.5	3581.2	3556.2	3631.4	3947.4	4635.3
42.5°	6554.0	6555.4	6496.9	6267.1	5643.4	4826.0	4071.3	4032.4	4031.0	4363.7	5047.4
45°	6819.9	6838.0	6925.7	6890.9	6379.9	5534.7	4699.3	4658.9	4590.7	4904.0	5519.4
47.5°	6943.8	6967.5	7232.1	7371.3	7024.6	6237.9	5447.0	5362.1	5228.4	5622.5	6047.1
50°	6931.3	6973.1	7342.1	7765.4	7609.4	6950.8	6261.6	6221.2	6002.6	6382.7	6569.3
52.5°	6647.3	6736.4	7349.0	8004.8	8059.1	7608.0	7104.0	7028.8	6923.0	7176.4	7059.4
55°	5875.9	5984.5	7055.2	8081.4	8410.0	8181.7	7928.3	7867.0	7691.6	7925.5	7486.9
57.5°	5456.8	5550.1	6437.0	8043.8	8708.0	8712.2	8662.1	8611.9	8467.1	8666.2	7988.1
60°	5204.8	5298.0	6107.0	7906.0	8978.1	9271.9	9351.3	9345.7	9136.9	9508.6	8575.7
62.5°	4835.8	4963.9	5763.1	7548.1	9170.3	9823.3	10062.8	10025.2	9792.7	10385.8	9157.7
65°	4090.8	4202.2	5058.6	6957.8	9057.5	10280.0	10834.2	10853.7	10584.9	11211.5	9617.2
67.5°	2868.3	2950.5	3801.2	5718.5	8291.7	10430.4	11623.7	11622.3	11164.2	11634.8	9413.9
70°	1662.5	1775.3	2245.9	3535.3	6450.9	9746.7	11742.0	11782.4	10928.9	10750.6	7790.4
72.5°	643.3	736.6	1272.6	1878.3	3364.0	7466.0	10100.4	10218.7	9146.6	8293.1	5422.0
75°	192.1	214.4	598.7	999.7	1350.6	3606.3	6838.0	6871.4	6274.1	5172.7	2779.2
77.5°	143.4	158.7	261.8	505.4	473.4	1093.0	3538.1	3863.9	3330.6	1847.7	765.8
80°	97.5	115.6	186.6	246.5	175.4	291.0	994.2	1091.6	1016.4	414.9	192.1
82.5°	43.2	55.7	132.3	123.9	64.0	83.5	306.3	325.8	210.3	125.3	66.8
85°	4.2	5.6	50.1	54.3	23.7	19.5	64.0	64.0	45.9	43.2	27.8
87.5°	0.0	0.0	1.4	2.8	2.8	4.2	5.6	7.0	8.4	11.1	13.9
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: P636522
CATALOG NUMBER: GWS-SA3F-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6	2741.6
2.5°	2766.7	2750.0	2770.9	2787.6	2791.7	2761.1	2743.0	2716.6	2711.0	2712.4	2705.4
5°	2804.3	2795.9	2811.2	2793.1	2745.8	2656.7	2580.1	2495.2	2449.2	2422.8	2420.0
7.5°	2873.9	2869.7	2853.0	2770.9	2623.3	2425.5	2234.8	2048.2	1932.6	1890.9	1883.9
10°	2976.9	2968.6	2900.3	2705.4	2390.7	2010.6	1690.4	1423.0	1260.1	1212.8	1154.3
12.5°	3095.3	3078.6	2929.6	2564.8	2039.9	1513.5	1113.9	814.5	673.9	632.1	632.1
15°	3209.5	3173.3	2912.9	2332.3	1608.2	984.4	622.4	470.6	427.5	416.3	416.3
17.5°	3326.4	3256.8	2847.4	2014.8	1111.1	582.0	414.9	385.7	380.1	381.5	382.9
20°	3436.4	3327.8	2731.9	1633.3	708.7	406.6	371.8	364.8	362.0	364.8	363.4
22.5°	3556.2	3393.3	2556.4	1216.9	460.9	366.2	353.7	348.1	345.3	349.5	349.5
25°	3674.5	3440.6	2323.9	818.7	366.2	341.1	334.2	328.6	325.8	327.2	327.2
27.5°	3735.8	3422.5	2019.0	522.1	328.6	316.1	309.1	302.1	298.0	296.6	298.0
30°	3777.6	3366.8	1645.8	371.8	298.0	282.7	275.7	270.1	259.0	252.0	254.8
32.5°	3843.0	3311.1	1240.6	311.9	272.9	249.2	238.1	224.2	208.9	201.9	201.9
35°	3921.0	3234.5	870.2	281.3	246.5	221.4	200.5	176.8	158.7	153.2	153.2
37.5°	4024.0	3162.1	579.2	260.4	224.2	197.7	168.5	140.6	121.1	118.4	117.0
40°	4178.6	3100.9	408.0	245.1	204.7	172.7	137.8	108.6	94.7	90.5	90.5
42.5°	4379.1	3038.2	323.0	229.7	188.0	149.0	110.0	86.3	75.2	72.4	71.0
45°	4626.9	2964.4	281.3	215.8	171.3	123.9	87.7	72.4	64.0	61.3	61.3
47.5°	4895.6	2864.1	261.8	197.7	151.8	100.3	73.8	62.7	58.5	57.1	55.7
50°	5160.2	2729.1	245.1	181.0	129.5	82.2	64.0	57.1	54.3	52.9	52.9
52.5°	5391.3	2571.7	224.2	161.5	105.8	71.0	57.1	52.9	50.1	47.3	45.9
55°	5589.1	2400.5	197.7	139.2	86.3	62.7	52.9	48.7	45.9	43.2	41.8
57.5°	5843.9	2303.0	158.7	112.8	71.0	55.7	48.7	44.6	41.8	37.6	37.6
60°	6126.5	2232.0	118.4	89.1	61.3	51.5	44.6	40.4	37.6	33.4	33.4
62.5°	6353.5	2126.2	93.3	72.4	52.9	45.9	40.4	36.2	33.4	29.2	29.2
65°	6439.8	1907.6	76.6	57.1	43.2	40.4	36.2	33.4	29.2	25.1	25.1
67.5°	6049.9	1470.4	64.0	45.9	36.2	34.8	32.0	30.6	25.1	22.3	20.9
70°	*4791.2*	*896.7*	*52.9*	*37.6*	*30.6*	*29.2*	*29.2*	*26.5*	*22.3*	*20.9*	*19.5*
72.5°	3283.3	462.3	43.2	30.6	26.5	26.5	25.1	23.7	20.9	19.5	19.5
75°	1705.7	154.6	33.4	23.7	20.9	22.3	22.3	20.9	19.5	19.5	18.1
77.5°	488.7	69.6	25.1	18.1	16.7	16.7	18.1	18.1	18.1	16.7	16.7
80°	126.7	40.4	18.1	13.9	13.9	13.9	13.9	15.3	16.7	15.3	15.3
82.5°	51.5	22.3	12.5	11.1	11.1	11.1	11.1	12.5	13.9	13.9	13.9
85°	32.0	11.1	9.7	9.7	9.7	8.4	8.4	9.7	9.7	11.1	11.1
87.5°	19.5	8.4	8.4	8.4	8.4	7.0	7.0	7.0	7.0	7.0	7.0
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

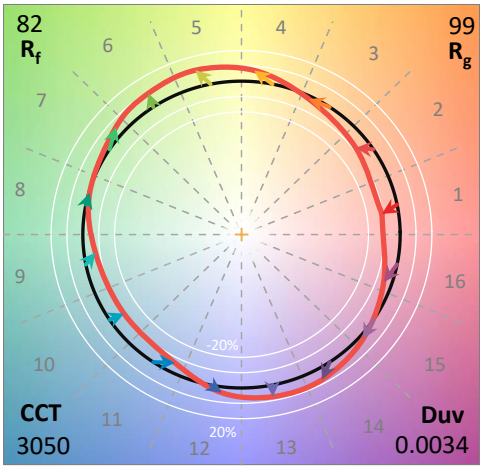
Test Information

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

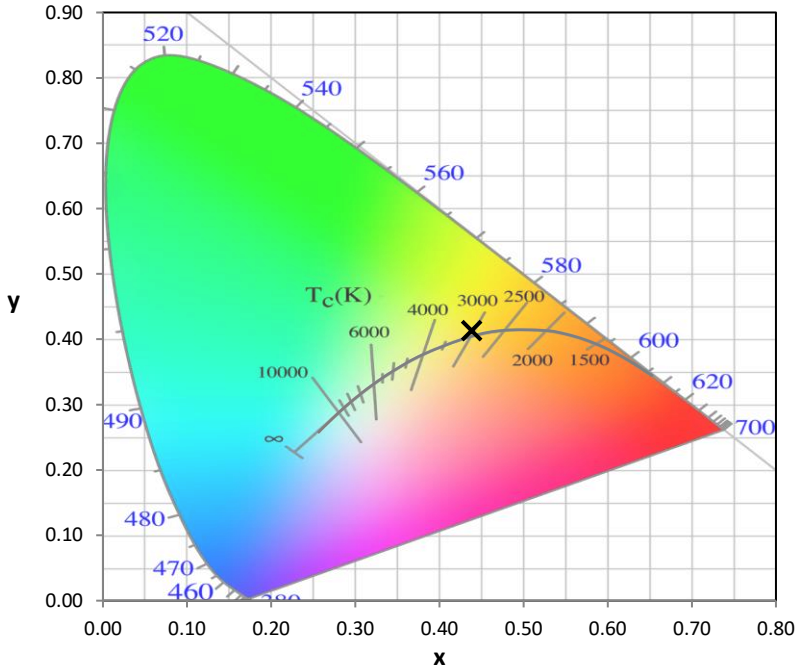
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

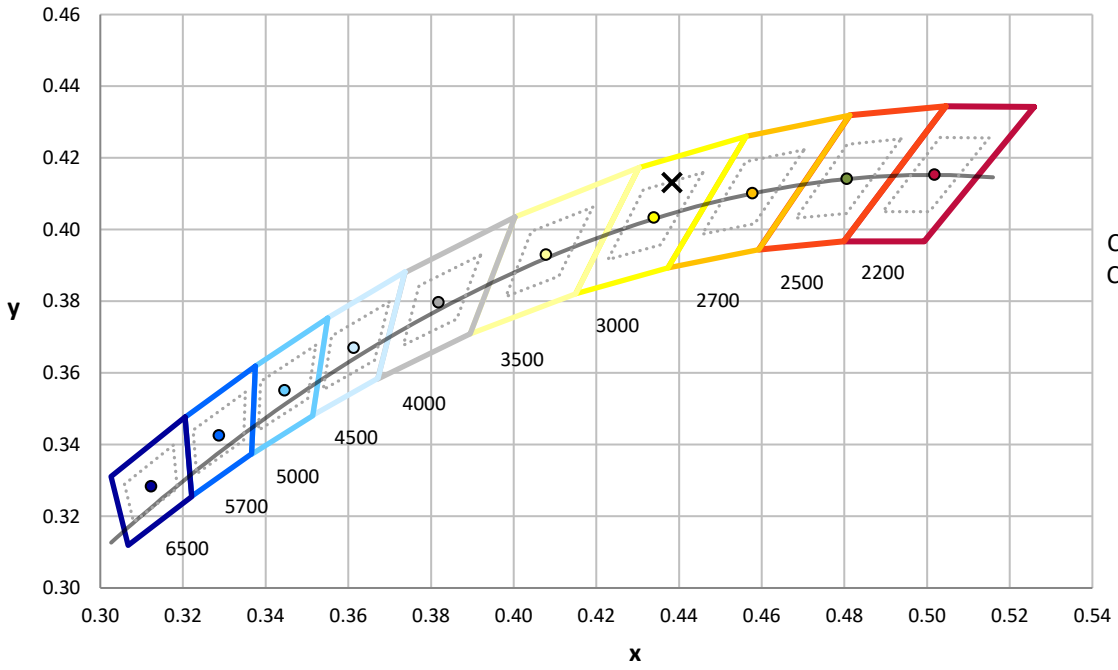
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

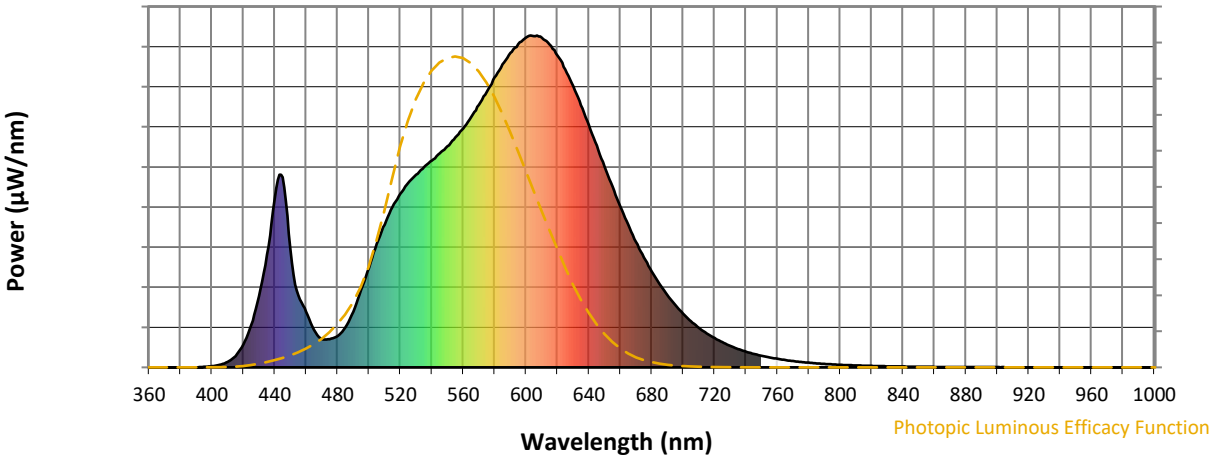


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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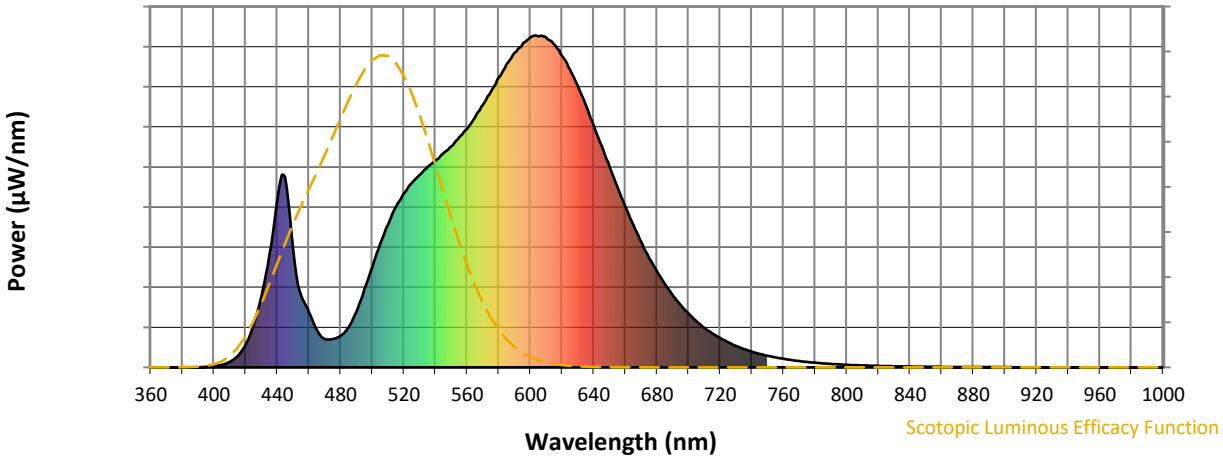
Scotopic Flux vs. Wavelength



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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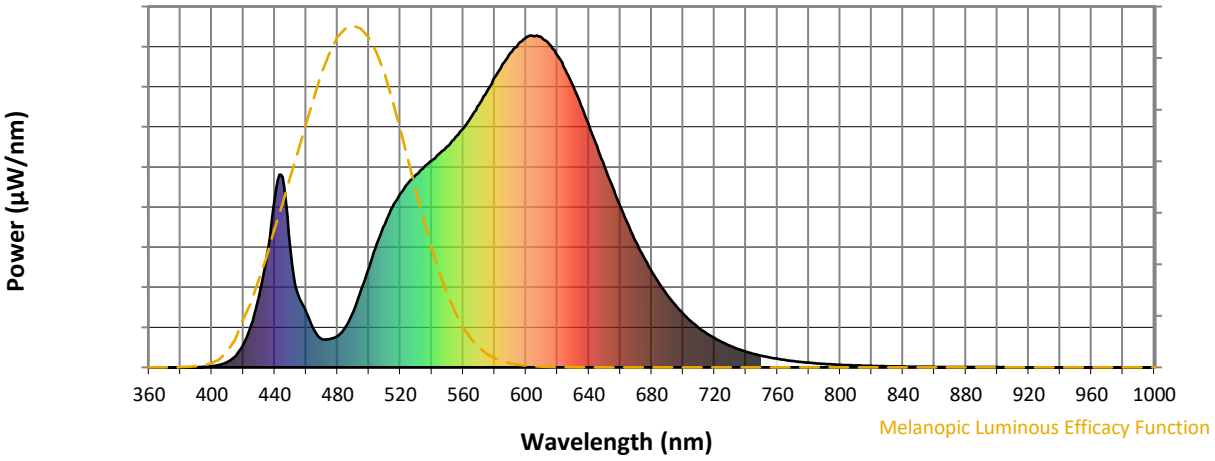
Melanopic Flux vs. Wavelength



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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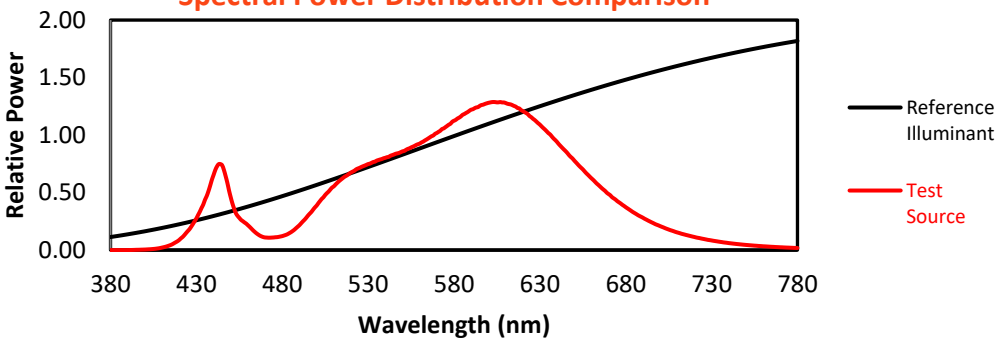
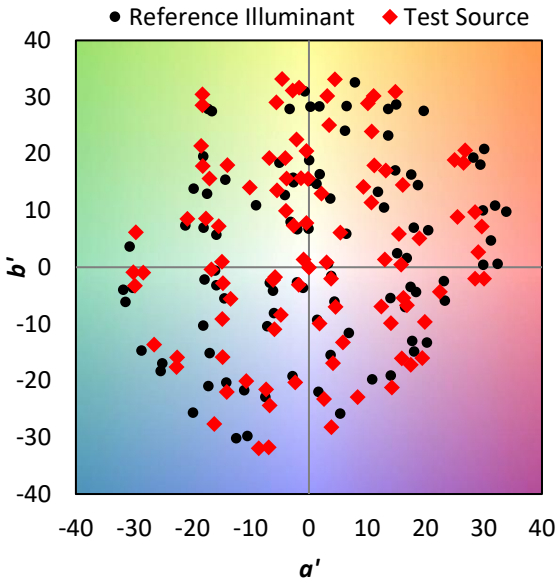
Summary

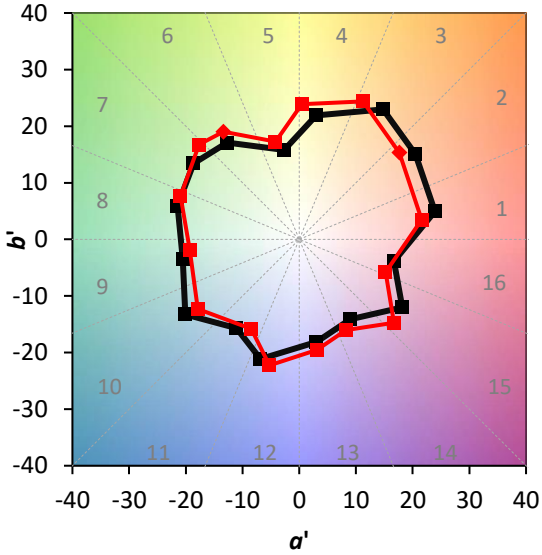
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

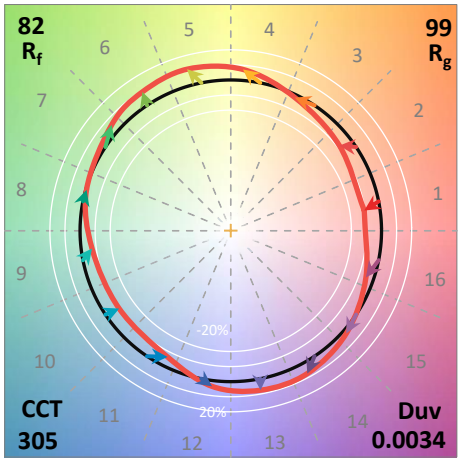
Spectral Power Distribution Comparison

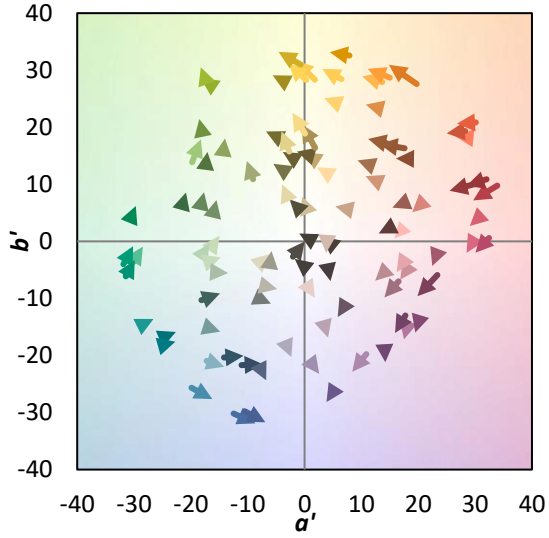


Color Vector Graphics









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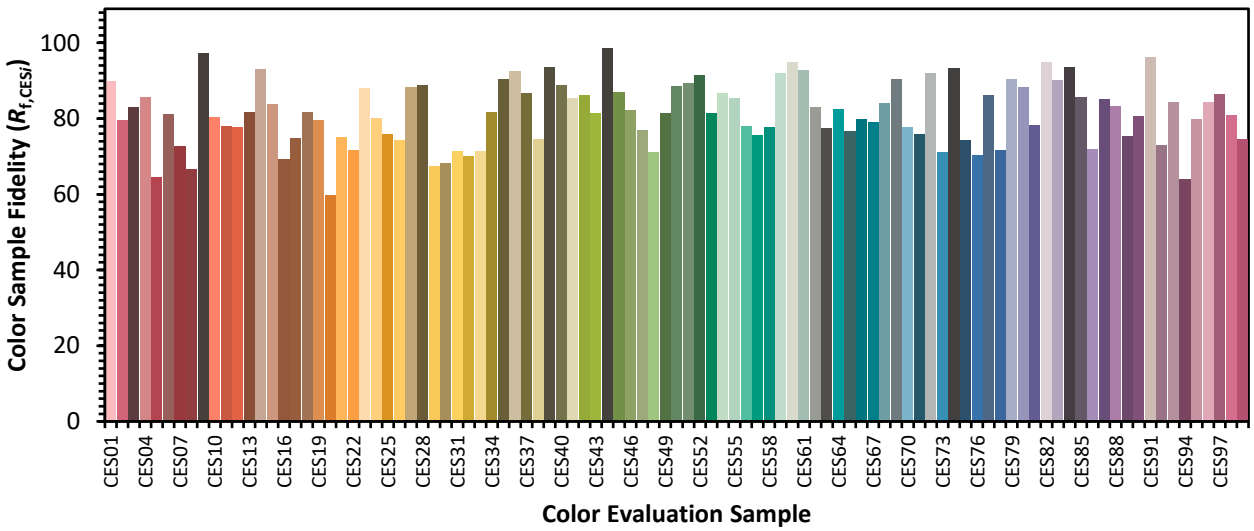
Individual Sample Fidelity Index ($R_{f,i}$)

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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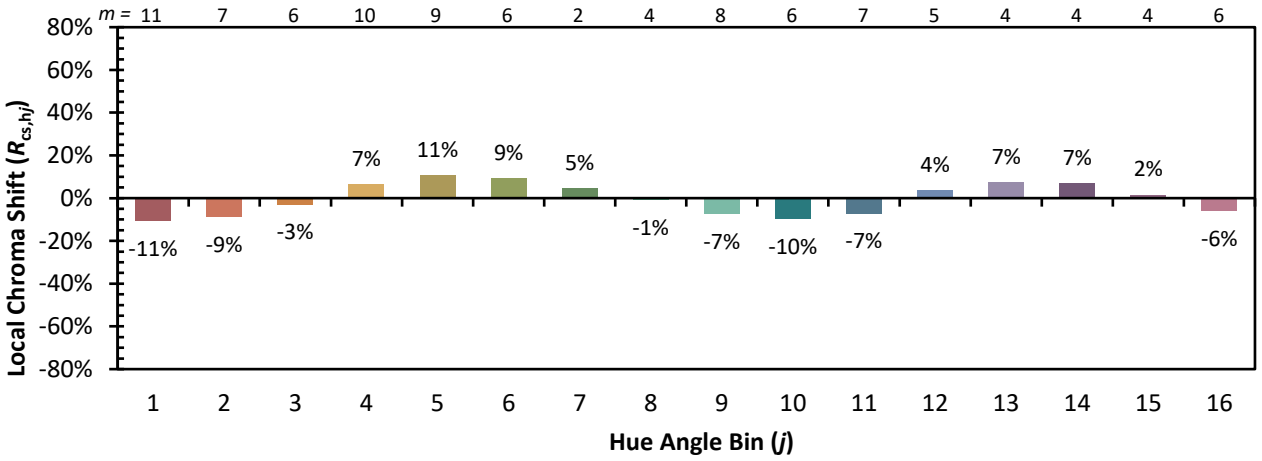
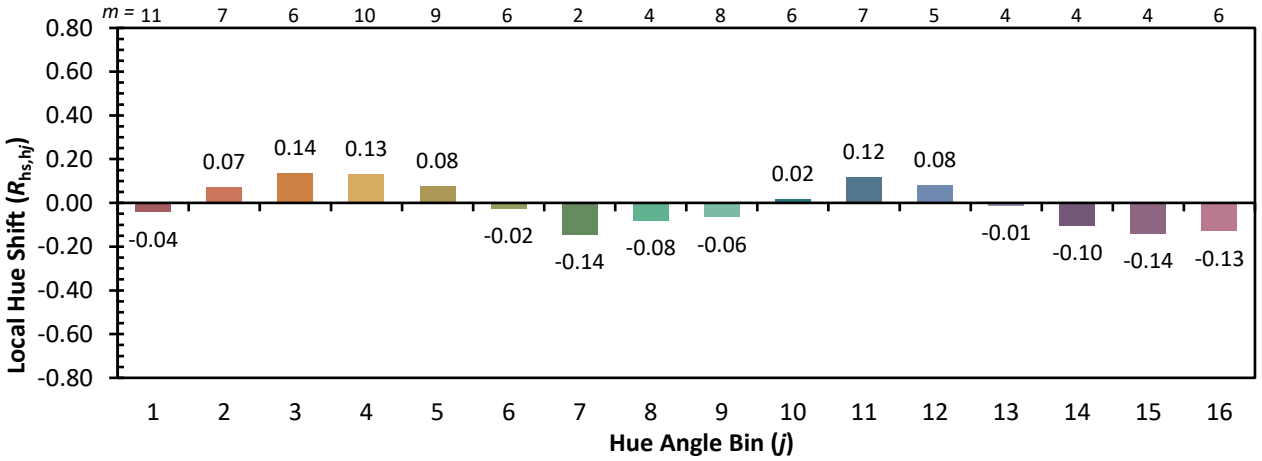
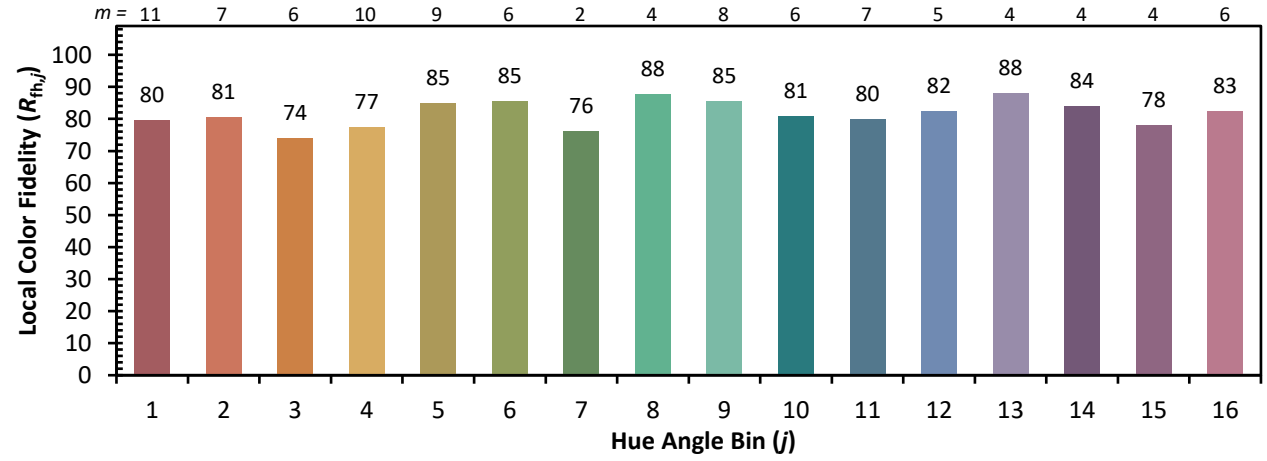
Color Rendition by Hue-Angle Bin







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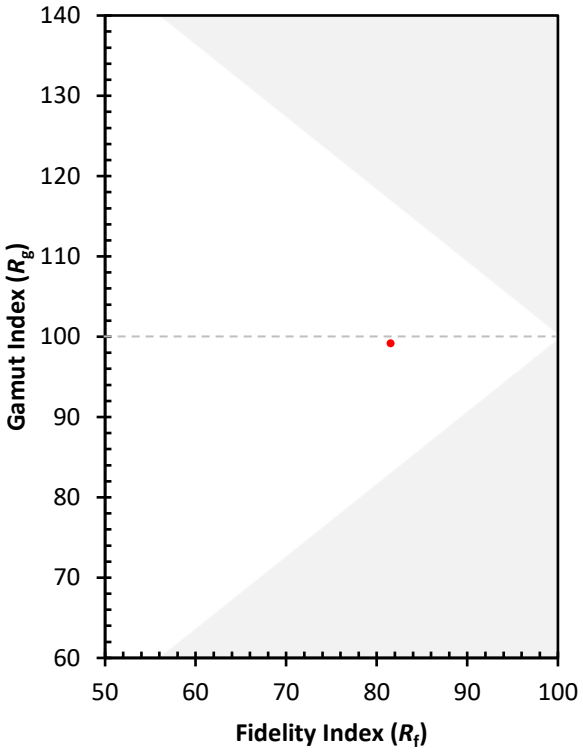
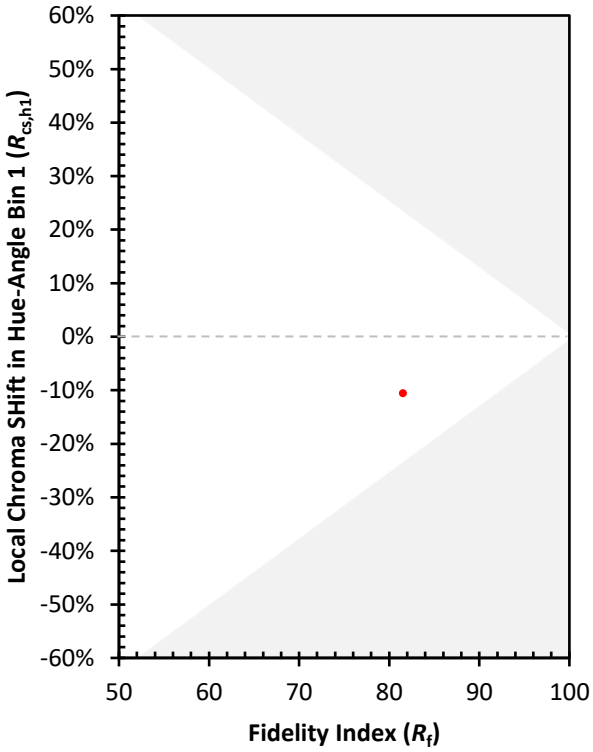
Measure Comparisons





(END OF REPORT)