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: P636498

Luminaire Tested: GWS-SA3F-830-U-SL4-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:	P636498
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-35)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3F-830-U-SL4-W
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	18654 lumens
Efficiency:	N/A
Efficacy:	101.8 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
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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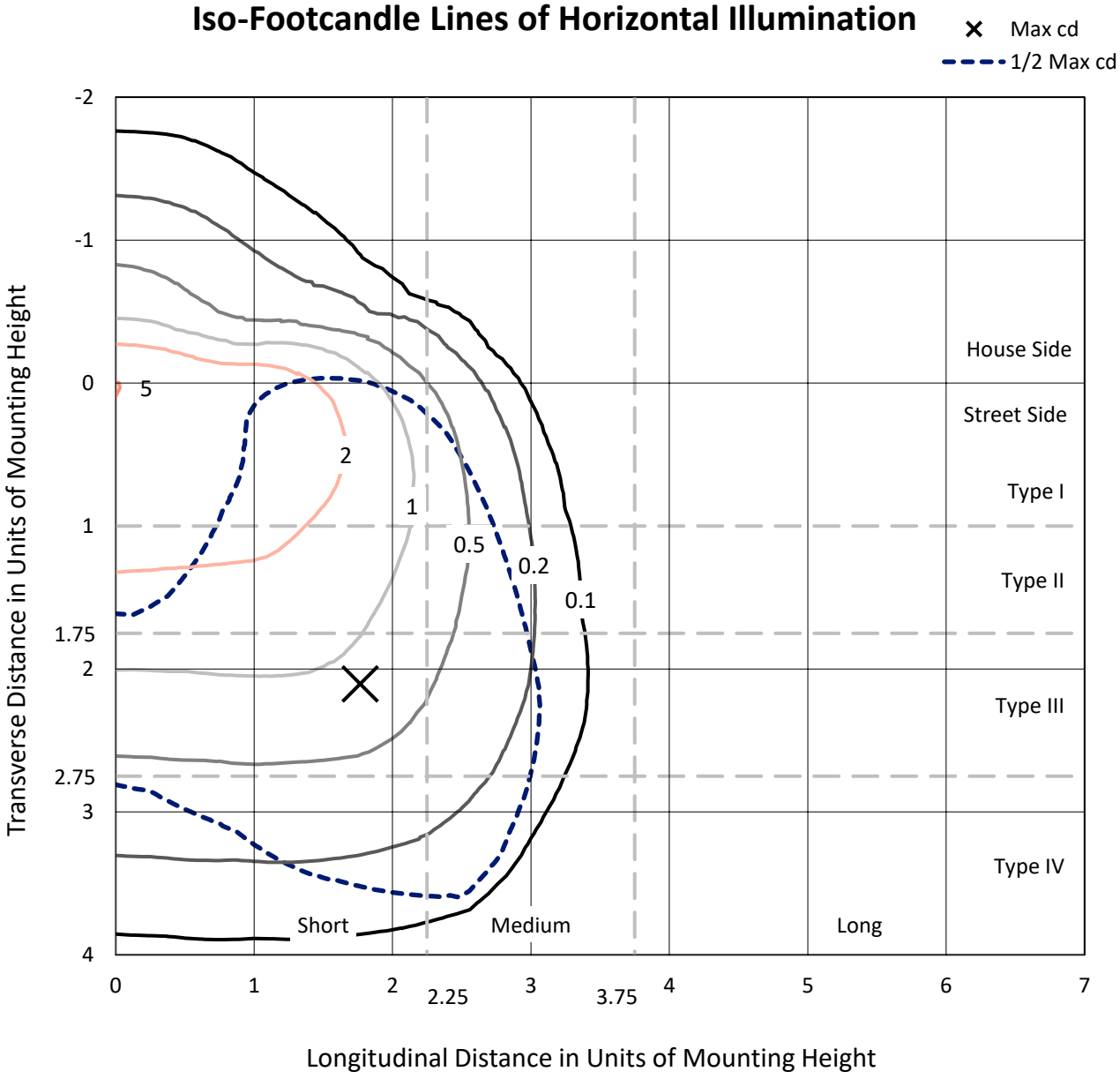
REPORT NUMBER: P636498
CATALOG NUMBER: GWS-SA3F-830-U-SL4-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
Type IV - Short - N/A

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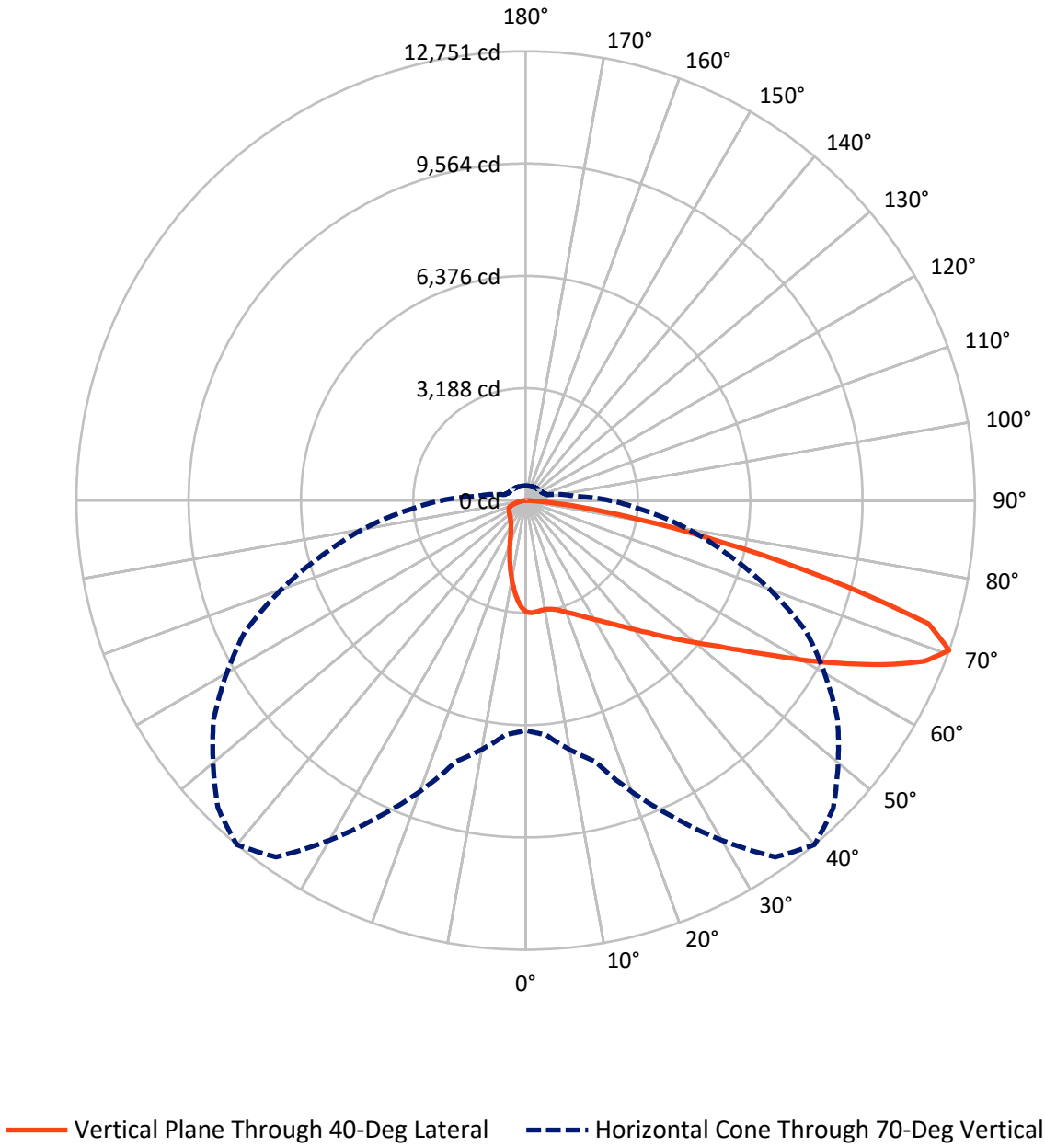
Luminous Intensity Polar Plot



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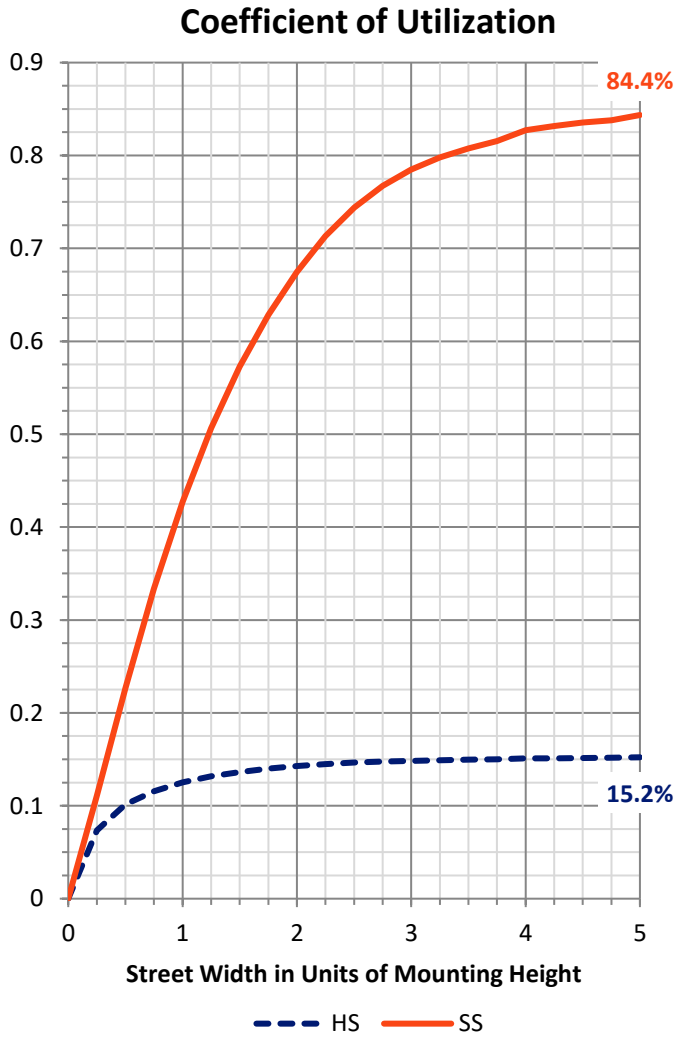
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2873.2	0.0	2873.2
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	15780.8	0.0	15780.8
	% Fixture	84.6	0.0	84.6
Total	Lumens	18654.0	0.0	18654.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.8	1.5
10°-20°	729.4	3.9
20°-30°	1145.3	6.1
30°-40°	1722.0	9.2
40°-50°	2658.0	14.2
50°-60°	3947.3	21.2
60°-70°	4975.5	26.7
70°-80°	2877.3	15.4
80°-90°	319.3	1.7
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°	18654.0	100.0
0°-180°	18654.0	100.0



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REPORT NUMBER: P636498
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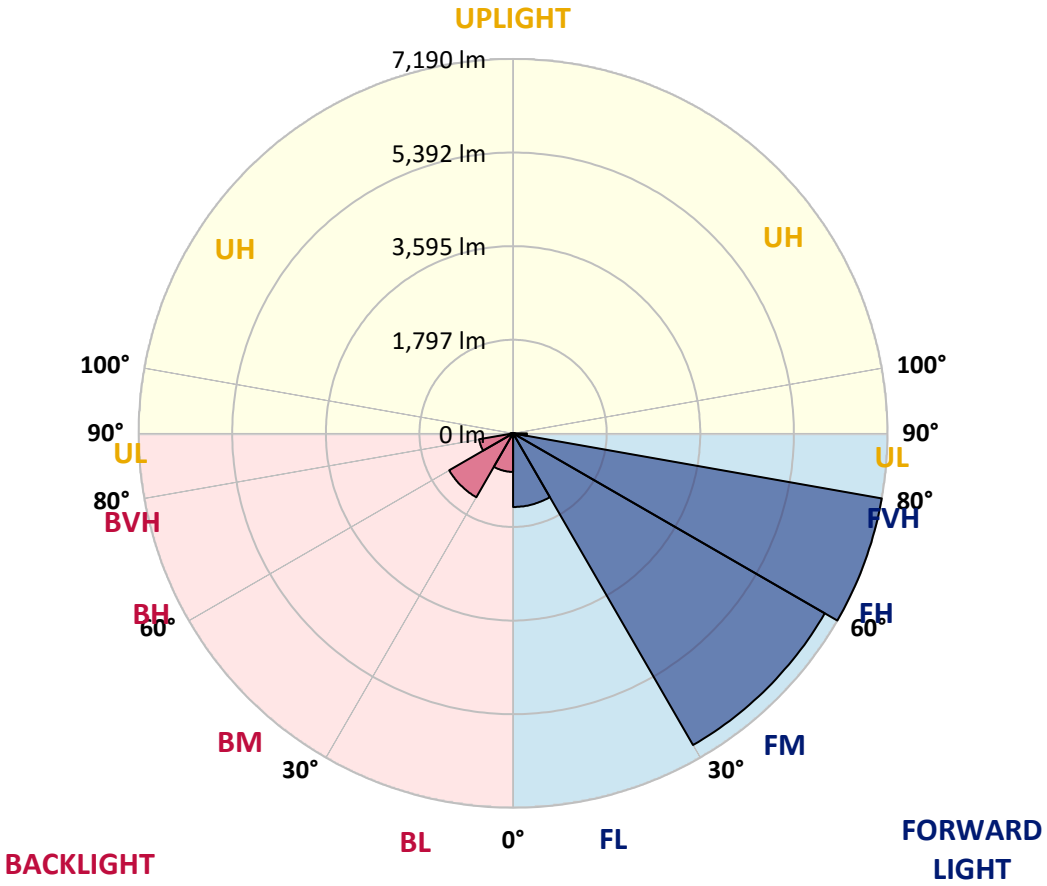
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1414.1	7.6			
FM	(30°-60°)	6911.1	37.0			
FH	(60°-80°)	7189.7	38.5			G3/7500
FVH	(80°-90°)	265.9	1.4			G3/500
BL	(0°-30°)	740.5	4.0	B2/1000		
BM	(30°-60°)	1416.2	7.6	B2/2500		
BH	(60°-80°)	663.1	3.6	B2/1000		G2/1000
BVH	(80°-90°)	53.4	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
Type IV Short



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REPORT NUMBER: P636498
CATALOG NUMBER: GWS-SA3F-830-U-SL4-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3167.7	3167.7	3167.7	3167.7	3167.7	*3167.7*	3167.7	3167.7	3167.7	3167.7	3167.7
2.5°	3187.2	3192.7	3196.9	3202.5	3199.7	*3191.3*	3198.3	3198.3	3183.0	3166.3	3151.0
5°	3191.3	3198.3	3196.9	3195.5	3184.4	*3170.4*	3170.4	3162.1	3135.6	3109.2	3084.1
7.5°	3183.0	3181.6	3180.2	3176.0	3163.5	*3148.2*	3145.4	3128.7	3093.9	3057.7	3021.5
10°	3145.4	3144.0	3148.2	3157.9	3155.1	*3141.2*	3141.2	3125.9	3085.5	3041.0	2993.6
12.5°	3114.8	3114.8	3131.5	3157.9	3167.7	*3162.1*	3163.5	3152.3	3106.4	3053.5	2997.8
15°	3118.9	3120.3	3156.5	3199.7	3217.8	*3213.6*	3215.0	3202.5	3151.0	3098.0	3022.9
17.5°	3146.8	3153.7	3216.4	3276.3	3299.9	*3294.4*	3284.6	3263.7	3205.3	3145.4	3053.5
20°	3205.3	3216.4	3297.2	3372.3	3400.2	*3387.7*	3371.0	3329.2	3265.1	3199.7	3086.9
22.5°	3320.8	3327.8	3416.9	3490.7	3513.0	*3497.7*	3464.2	3404.4	3330.6	3262.3	3127.3
25°	3483.7	3492.1	3577.0	3645.2	3639.7	*3621.6*	3575.6	3501.8	3414.1	3341.7	3185.8
27.5°	3677.3	3691.2	3774.7	3829.0	3792.8	*3766.4*	3714.9	3625.8	3526.9	3461.5	3274.9
30°	3888.9	3894.5	3965.5	4019.8	3964.1	*3927.9*	3865.2	3769.2	3680.1	3631.3	3408.5
32.5°	4093.6	4099.2	4160.4	4191.1	4132.6	*4106.1*	4051.8	3950.2	3887.5	3861.1	3607.7
35°	4309.4	4308.0	4358.1	4384.6	4324.7	*4313.6*	4257.9	4179.9	4168.8	4203.6	3898.7
37.5°	4525.2	4512.7	4539.2	4574.0	4540.5	*4551.7*	4515.5	4489.0	4532.2	4622.7	4285.7
40°	4697.9	4697.9	4725.7	4768.9	4780.0	*4828.8*	4807.9	4842.7	4981.9	5197.8	4764.7
42.5°	4851.0	4852.4	4910.9	4977.8	5058.5	*5133.7*	5150.4	5240.9	5529.1	5867.5	5366.2
45°	5011.2	5012.6	5091.9	5189.4	5360.7	*5504.1*	5537.5	5740.8	6152.9	6565.1	6019.3
47.5°	5196.4	5181.0	5291.0	5454.0	5697.6	*5903.7*	5990.0	6278.2	6799.0	7305.8	6634.7
50°	5405.2	5373.2	5495.7	5777.0	6077.7	*6360.4*	6505.2	6835.2	7492.4	7989.5	7213.9
52.5°	5640.5	5622.4	5750.5	6093.1	6552.5	*6878.4*	7074.7	7507.7	8166.3	8670.3	7673.4
55°	5932.9	5889.8	6075.0	6510.8	7109.5	*7524.4*	7756.9	8173.3	8902.9	9288.6	8024.3
57.5°	6253.2	6205.8	6453.7	7032.9	7833.5	*8288.8*	8579.8	8922.4	9596.3	9762.0	8230.4
60°	6598.5	6583.2	6877.0	7645.6	8696.8	*9225.9*	9436.2	9746.7	10199.2	10036.3	8178.8
62.5°	6914.6	6909.0	7336.4	8309.7	9611.6	*10193.6*	10360.7	10442.8	10633.6	10018.2	7769.5
65°	7247.3	7294.7	7872.5	9079.7	10660.1	*11230.9*	11300.6	11091.7	10779.8	9543.4	6931.3
67.5°	7289.1	7381.0	8209.5	9801.0	11654.2	*12193.1*	12137.4	11338.1	10348.2	8222.0	5433.1
70°	*6519.1*	*6679.2*	*7672.0*	*9911.0*	*12354.6*	*12751.4*	*12349.0*	*10807.6*	*8781.7*	*5956.6*	*3416.9*
72.5°	5447.0	5584.8	6462.0	8451.7	11450.9	*11956.4*	11411.9	9147.9	6205.8	3416.9	1740.5
75°	4239.8	4399.9	5208.9	6718.2	8572.9	*8774.8*	8501.9	6379.9	3411.3	1409.1	790.9
77.5°	2587.0	2702.6	3332.0	4551.7	5998.4	*5696.2*	4827.4	3577.0	1496.8	675.3	488.7
80°	1144.5	1215.5	1641.6	2445.0	3465.6	*3276.3*	2582.9	1527.4	818.7	428.9	341.1
82.5°	614.0	660.0	809.0	967.7	1521.9	*1591.5*	1290.7	880.0	440.0	245.1	194.9
85°	270.1	296.6	367.6	350.9	499.9	*491.5*	495.7	604.3	210.2	112.8	126.7
87.5°	0.0	0.0	0.0	0.0	1.4	*1.4*	15.3	80.8	20.9	33.4	29.2
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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Scaled Data Report

REPORT NUMBER: P636498
CATALOG NUMBER: GWS-SA3F-830-U-SL4-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3167.7	3167.7	3167.7	3167.7	3167.7	3167.7	3167.7	3167.7	3167.7	3167.7	3167.7
2.5°	3134.2	3109.2	3102.2	3093.9	3078.6	3052.1	3032.6	3010.3	3000.6	2989.4	2990.8
5°	3056.3	3025.6	2996.4	2958.8	2911.5	2858.6	2822.4	2780.6	2758.3	2737.4	2743.0
7.5°	2989.4	2942.1	2882.2	2802.9	2717.9	2623.2	2546.7	2486.8	2446.4	2418.6	2432.5
10°	2947.7	2892.0	2787.5	2658.1	2514.6	2369.8	2259.8	2156.8	2092.7	2042.6	2039.8
12.5°	2939.3	2866.9	2715.1	2527.2	2319.7	2126.2	1964.6	1825.4	1740.5	1677.8	1701.5
15°	2947.7	2855.8	2652.5	2406.0	2144.3	1882.5	1682.0	1521.9	1420.2	1363.1	1359.0
17.5°	2957.4	2844.6	2581.5	2275.1	1960.5	1661.1	1428.6	1258.7	1154.3	1097.2	1098.6
20°	2965.8	2827.9	2497.9	2131.7	1773.9	1455.0	1214.2	1052.6	959.3	917.6	924.5
22.5°	2979.7	2811.2	2408.8	1978.6	1583.1	1255.9	1044.3	913.4	857.7	829.9	831.3
25°	3006.1	2801.5	2316.9	1811.5	1395.2	1097.2	927.3	839.6	804.8	788.1	786.7
27.5°	3060.4	2809.8	2220.8	1650.0	1225.3	976.1	852.1	795.0	771.4	760.2	758.8
30°	3151.0	2843.2	2137.3	1485.7	1079.1	881.4	800.6	765.8	751.9	742.1	740.7
32.5°	3288.8	2905.9	2046.8	1332.5	960.7	811.8	760.2	742.1	732.4	726.8	726.8
35°	3497.7	3020.1	1957.7	1198.8	868.8	757.5	728.2	721.3	712.9	710.1	712.9
37.5°	3798.4	3202.5	1876.9	1081.9	803.4	715.7	693.4	696.2	689.2	693.4	697.6
40°	4179.9	3446.1	1808.7	985.8	754.7	685.1	662.8	672.5	668.3	672.5	679.5
42.5°	4663.1	3748.3	1757.2	910.6	719.9	660.0	639.1	648.8	646.1	651.6	658.6
45°	5201.9	4146.5	1733.5	857.7	694.8	641.9	619.6	626.6	623.8	628.0	634.9
47.5°	5718.5	4508.5	1754.4	827.1	673.9	626.6	602.9	605.7	604.3	602.9	607.1
50°	6164.1	4796.7	1814.3	817.3	660.0	611.3	589.0	590.4	586.2	577.8	580.6
52.5°	6527.5	5027.9	1850.5	817.3	653.0	594.5	573.7	575.1	566.7	555.6	557.0
55°	6767.0	5121.2	1821.2	815.9	650.2	580.6	558.3	559.7	551.4	537.5	538.9
57.5°	6835.2	5030.7	1698.7	800.6	647.5	569.5	543.0	545.8	540.2	524.9	524.9
60°	6644.4	4699.3	1474.5	765.8	640.5	562.5	531.9	536.1	533.3	518.0	518.0
62.5°	6144.6	4110.3	1207.2	712.9	621.0	554.2	522.1	530.5	537.5	529.1	527.7
65°	5208.9	3293.0	981.6	654.4	595.9	540.2	508.2	529.1	544.4	555.6	555.6
67.5°	3908.4	2357.3	800.6	593.2	558.3	512.4	490.1	509.6	520.7	527.7	531.9
70°	*2382.4*	*1386.8*	*630.7*	*522.1*	*504.0*	*470.6*	*453.9*	*434.4*	*419.1*	*416.3*	*417.7*
72.5°	1165.4	793.7	512.4	444.2	430.2	399.6	362.0	353.7	346.7	342.5	341.1
75°	641.9	552.8	423.3	369.0	343.9	306.3	298.0	284.0	281.3	275.7	277.1
77.5°	453.9	435.8	349.5	299.4	261.8	242.3	246.5	236.7	236.7	232.5	231.1
80°	341.1	342.5	268.7	218.6	193.5	186.6	190.8	190.8	188.0	186.6	185.2
82.5°	215.8	243.7	181.0	140.6	137.8	139.2	137.8	136.5	139.2	135.1	133.7
85°	149.0	175.4	110.0	83.5	83.5	82.2	84.9	83.5	86.3	82.2	82.2
87.5°	33.4	78.0	40.4	25.1	26.5	25.1	26.5	27.8	30.6	32.0	32.0
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

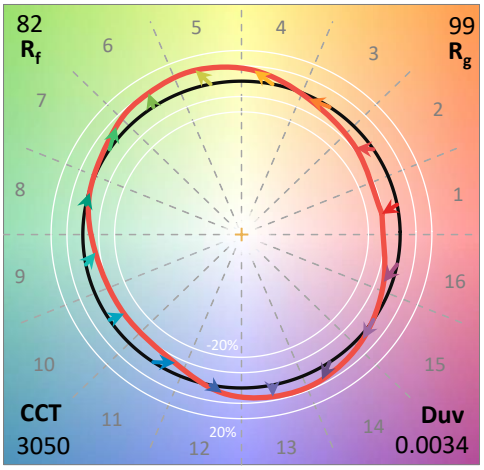
Test Information

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

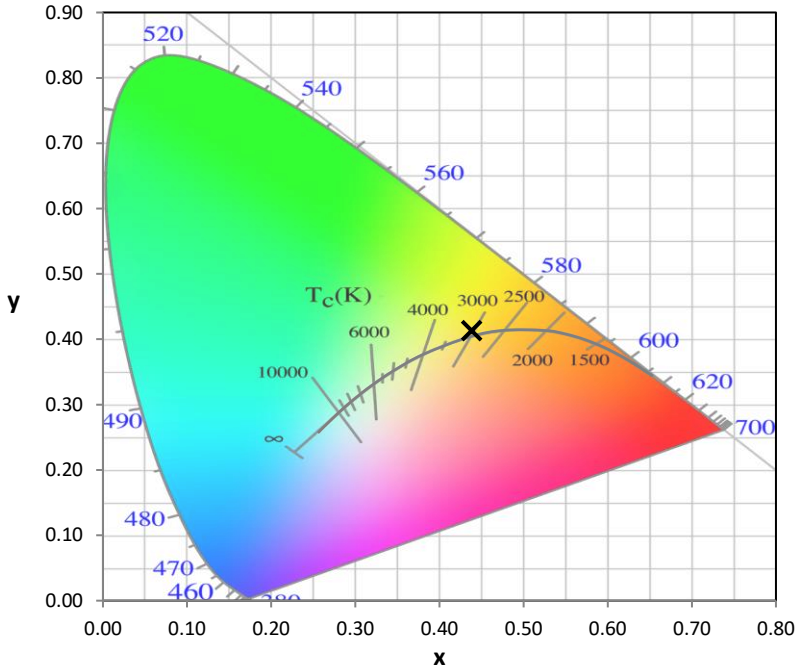
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

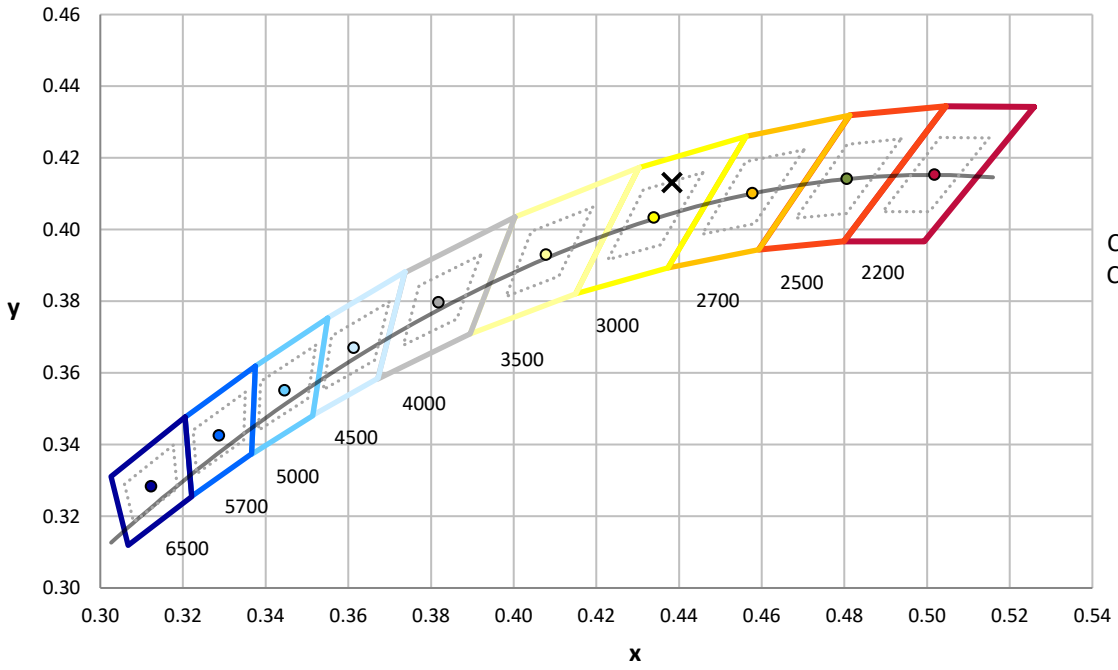
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

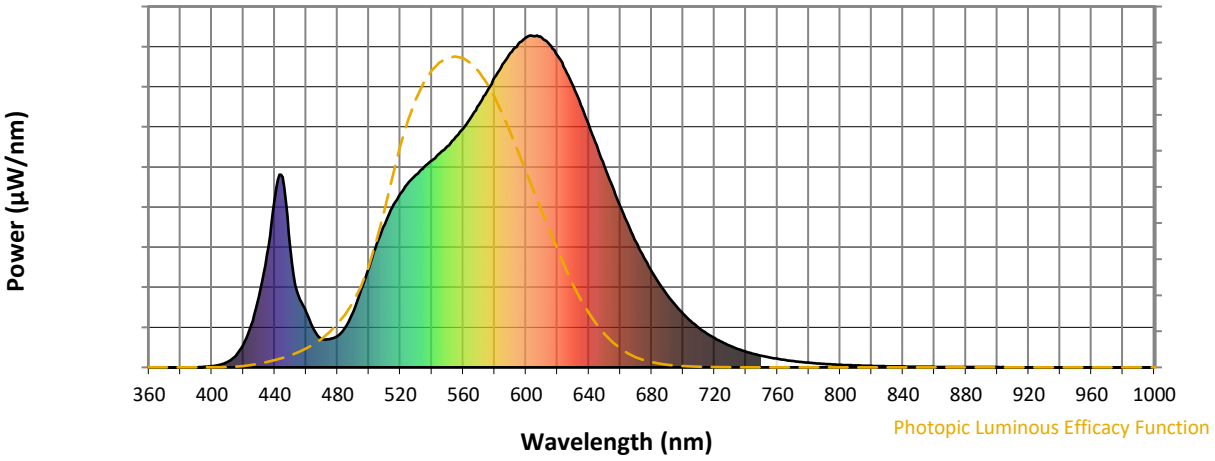


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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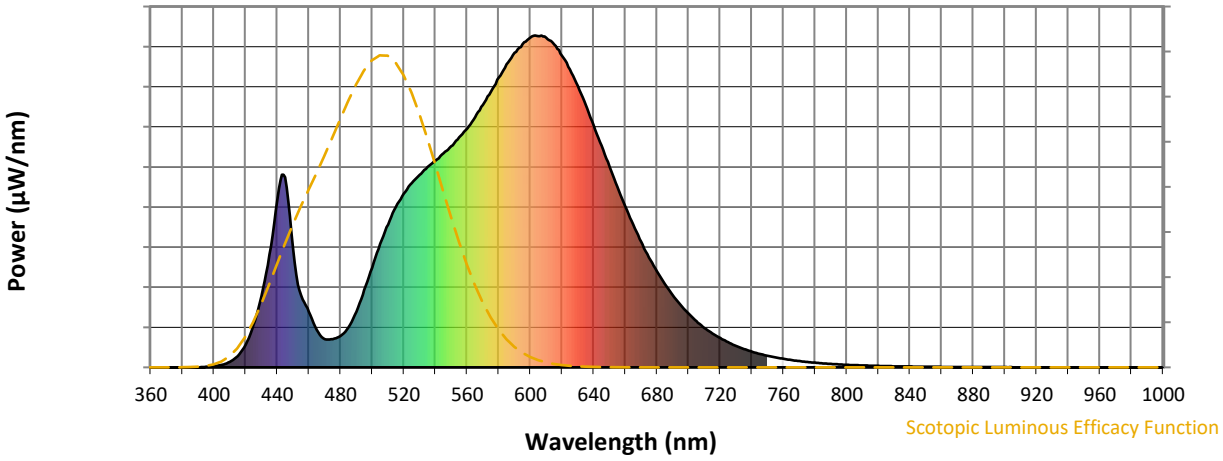
Scotopic Flux vs. Wavelength



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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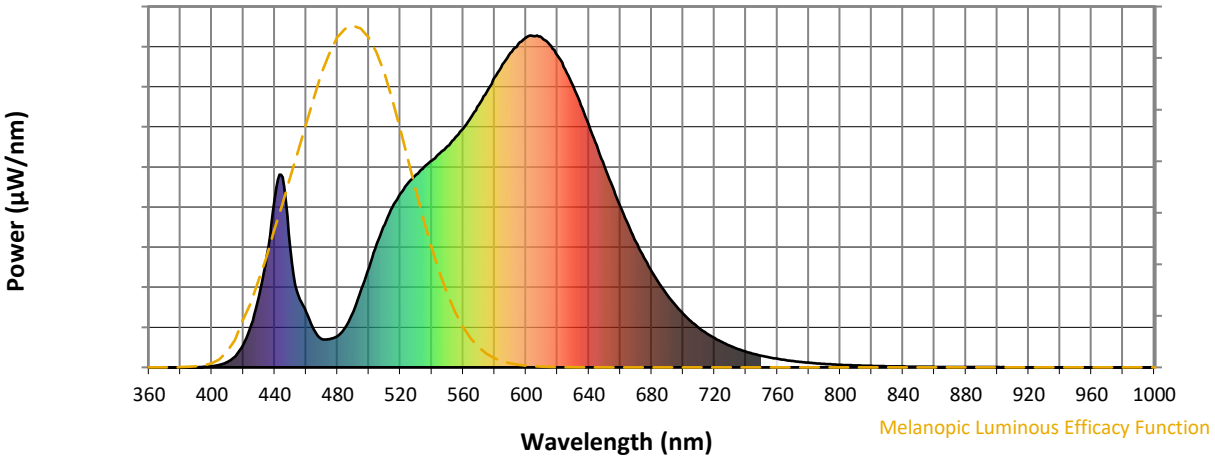
Melanopic Flux vs. Wavelength



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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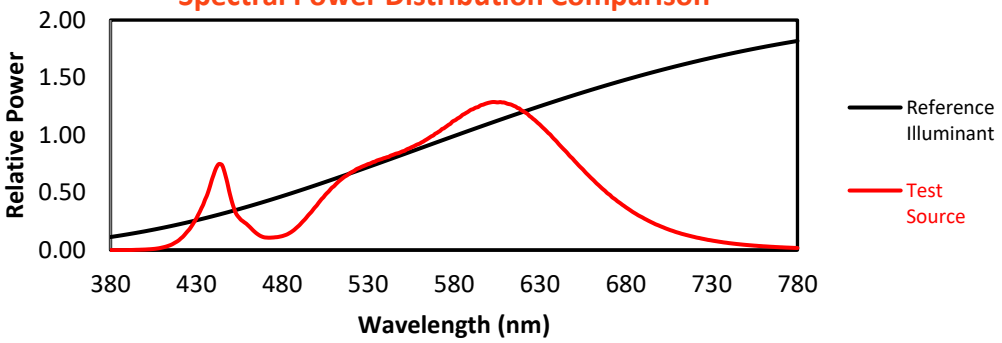
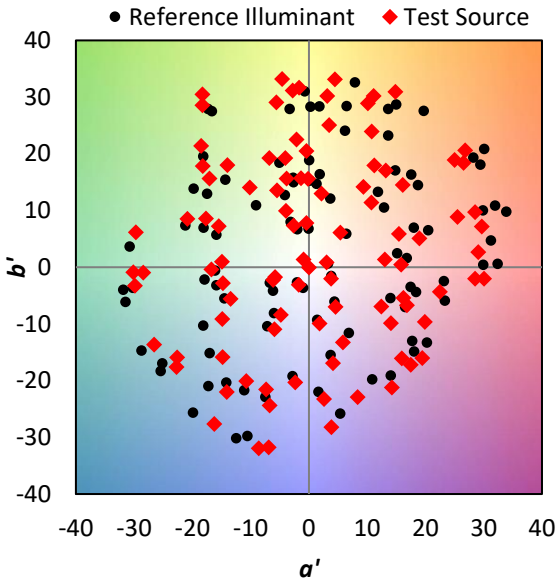
Summary

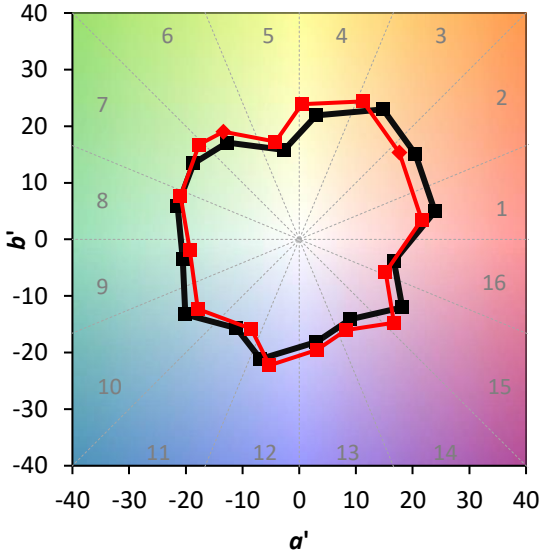
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

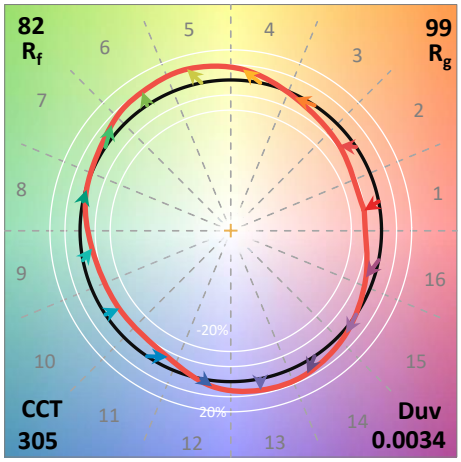
Spectral Power Distribution Comparison

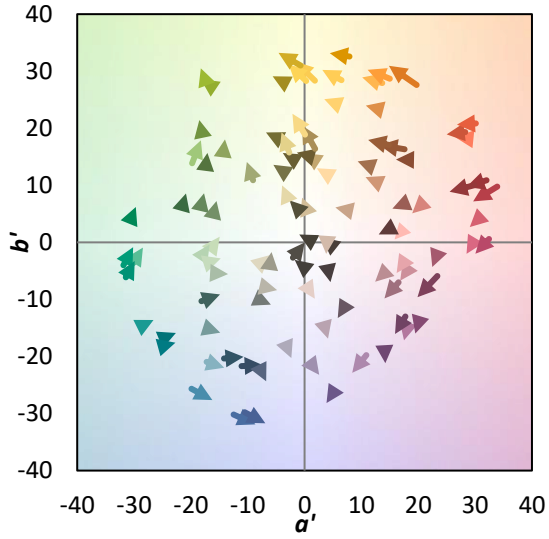


Color Vector Graphics









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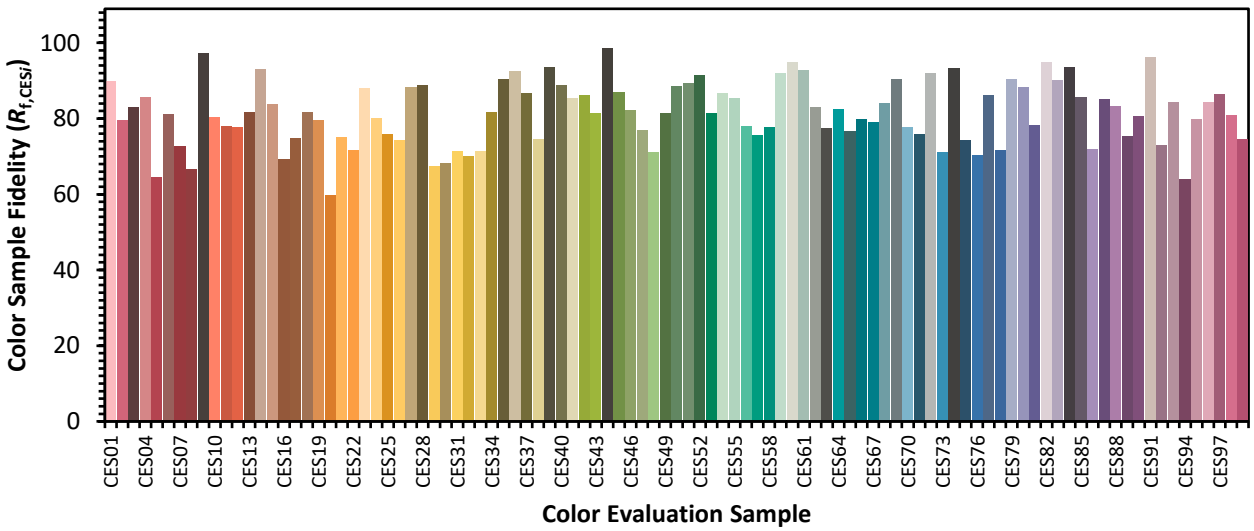
Individual Sample Fidelity Index ($R_{f,i}$)

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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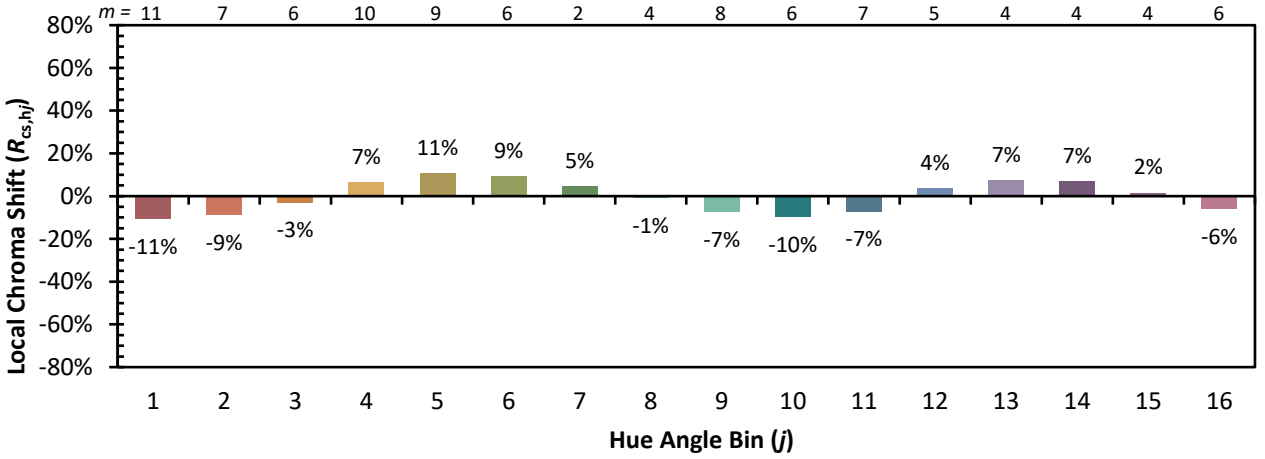
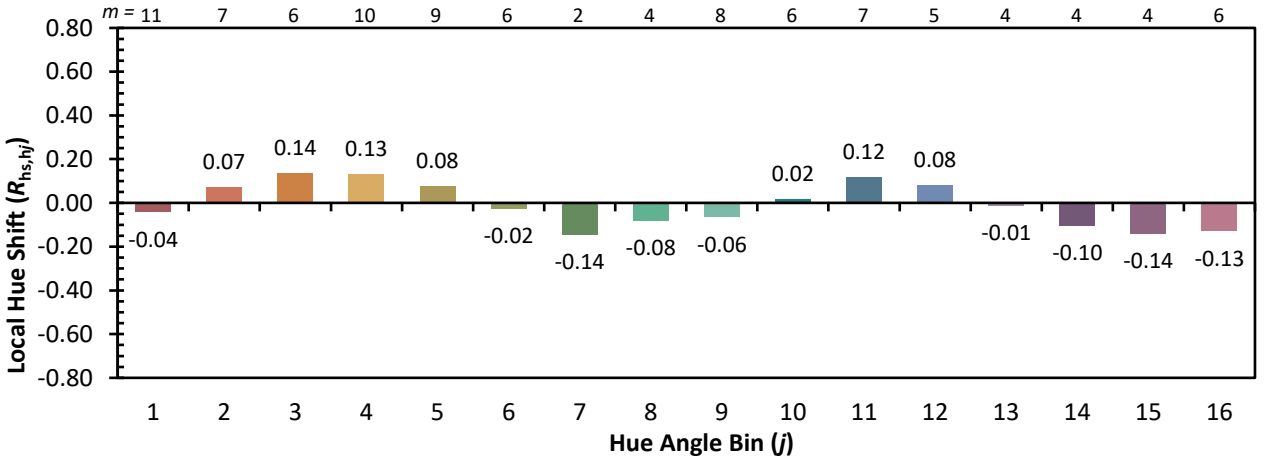
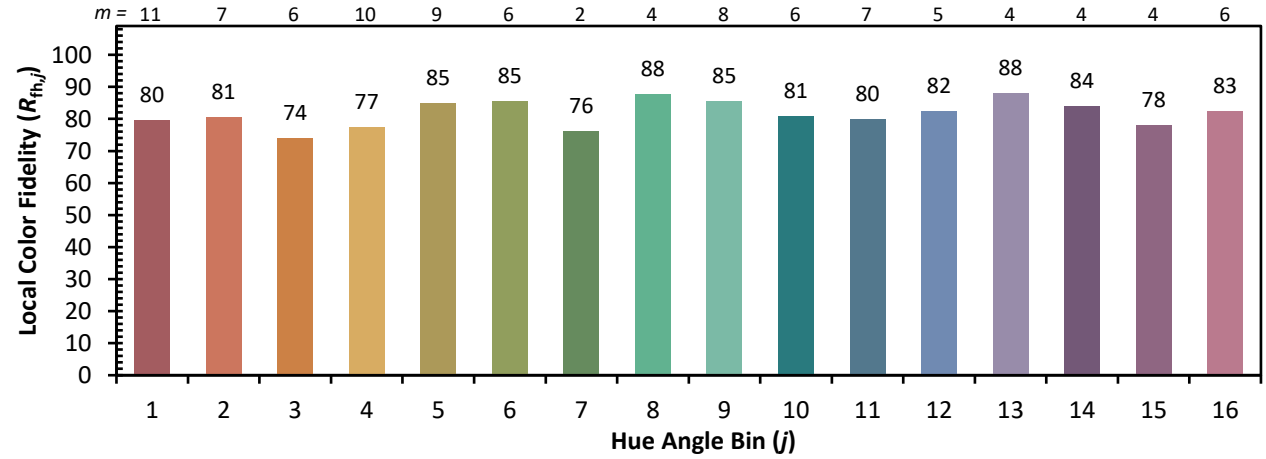
Color Rendition by Hue-Angle Bin







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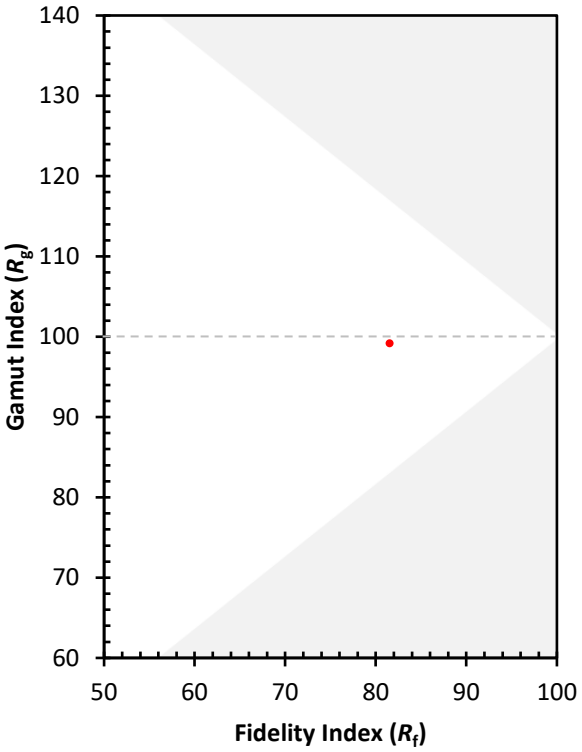
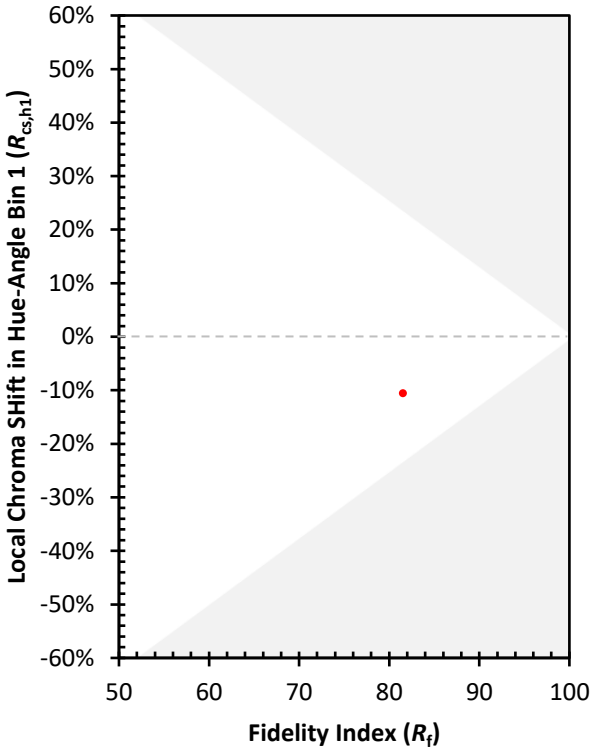
Measure Comparisons





(END OF REPORT)