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: P637974

Luminaire Tested: GWS-SA4D-830-U-SL2-W-GRSBK

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:	P637974
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-28)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4D-830-U-SL2-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11423 lumens
Efficiency:	N/A
Efficacy:	70.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

Input Watts (W):	162.1
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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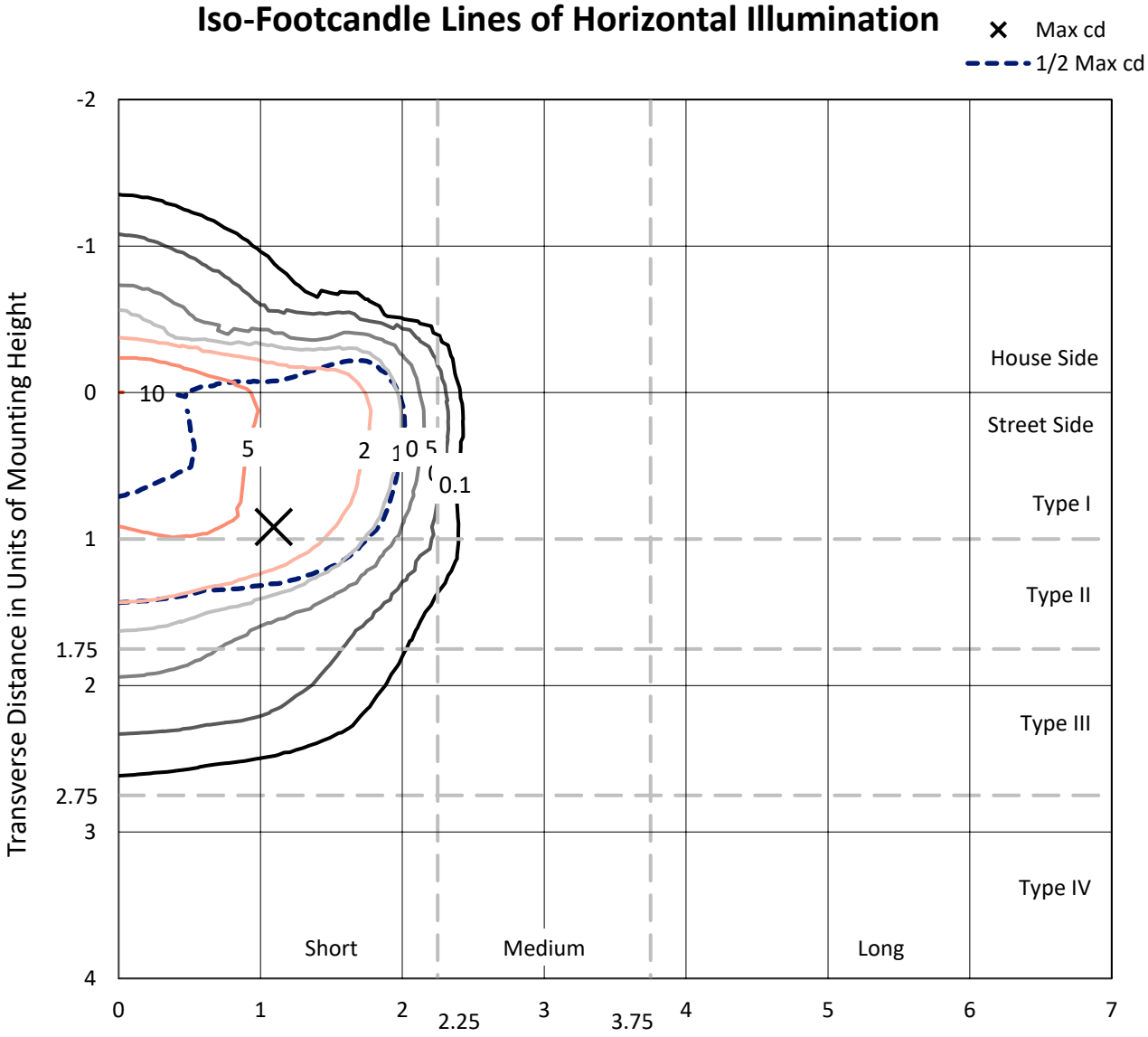
REPORT NUMBER: P637974
CATALOG NUMBER: GWS-SA4D-830-U-SL2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 10 fc
Type II - Short - N/A

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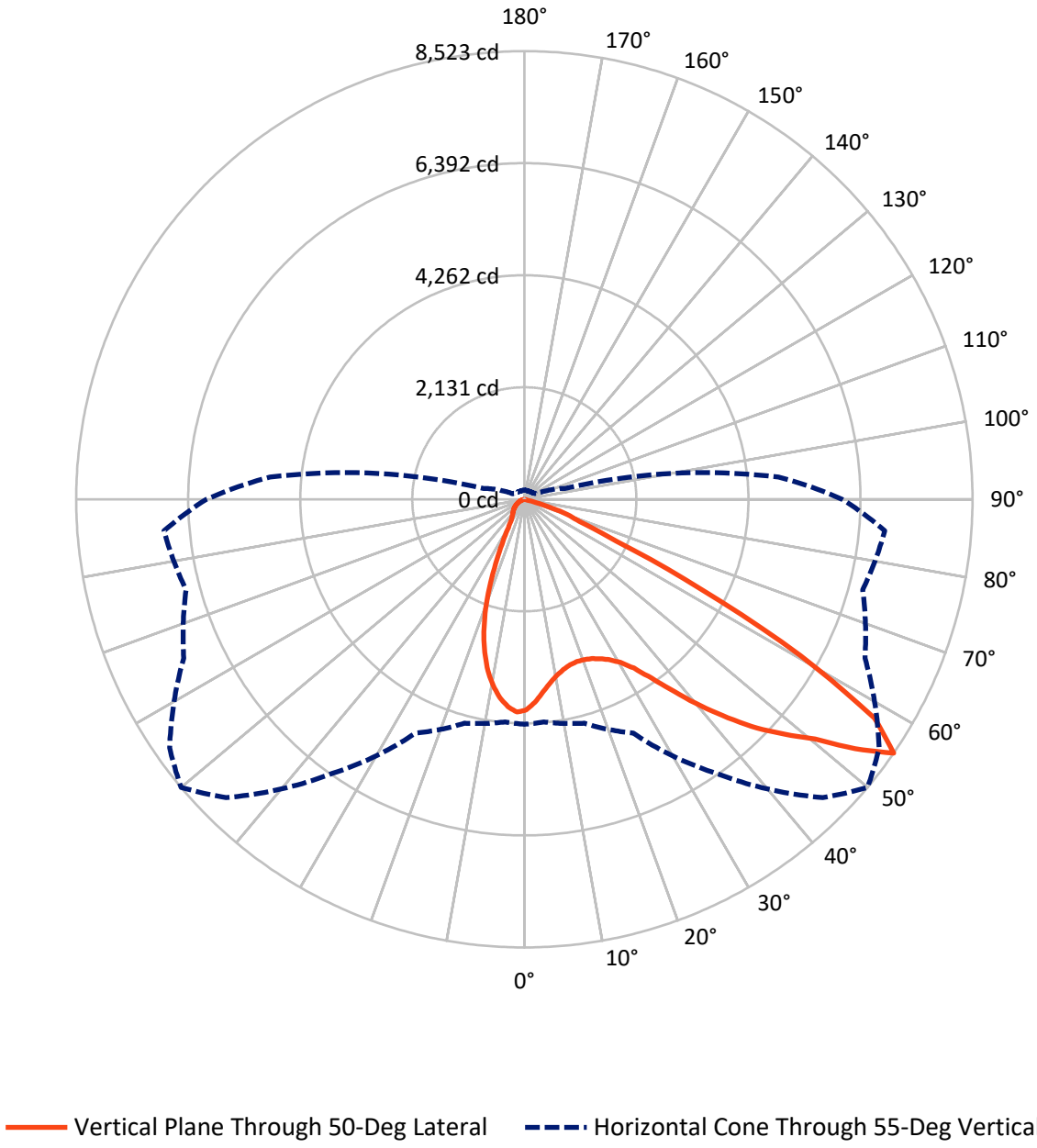
Luminous Intensity Polar Plot



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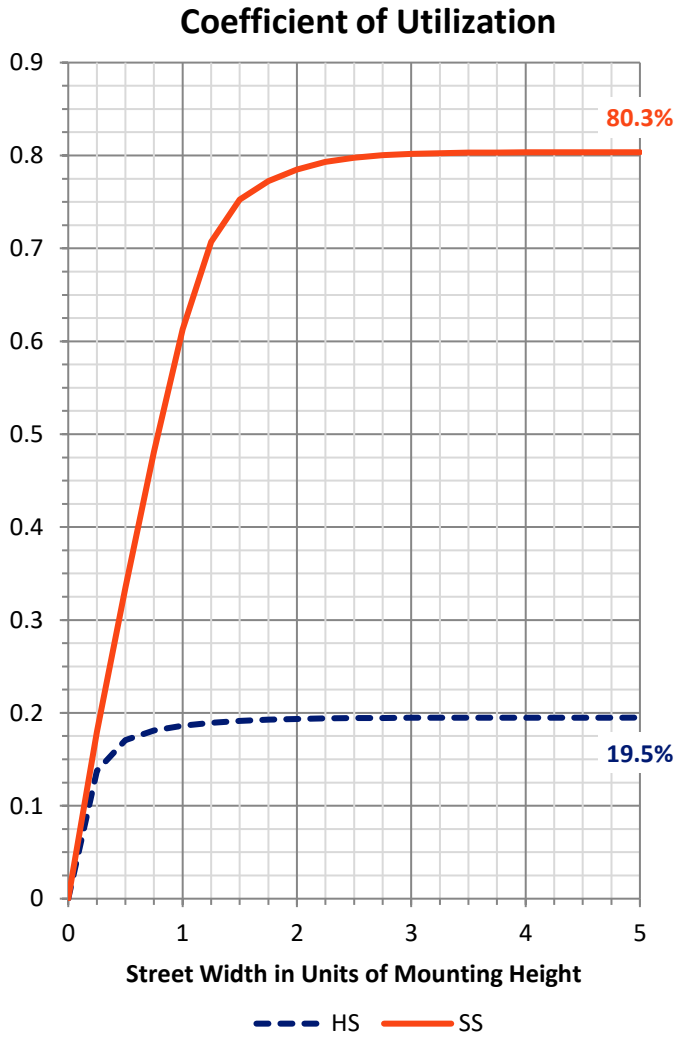
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2250.9	0.0	2250.9
	% Fixture	19.7	0.0	19.7
Street Side	Lumens	9172.1	0.0	9172.1
	% Fixture	80.3	0.0	80.3
Total	Lumens	11423.0	0.0	11423.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.0	3.1
10°-20°	866.1	7.6
20°-30°	1221.7	10.7
30°-40°	1807.9	15.8
40°-50°	2608.2	22.8
50°-60°	3076.6	26.9
60°-70°	1372.4	12.0
70°-80°	118.0	1.0
80°-90°	0.1	0.0
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°	11423.0	100.0
0°-180°	11423.0	100.0



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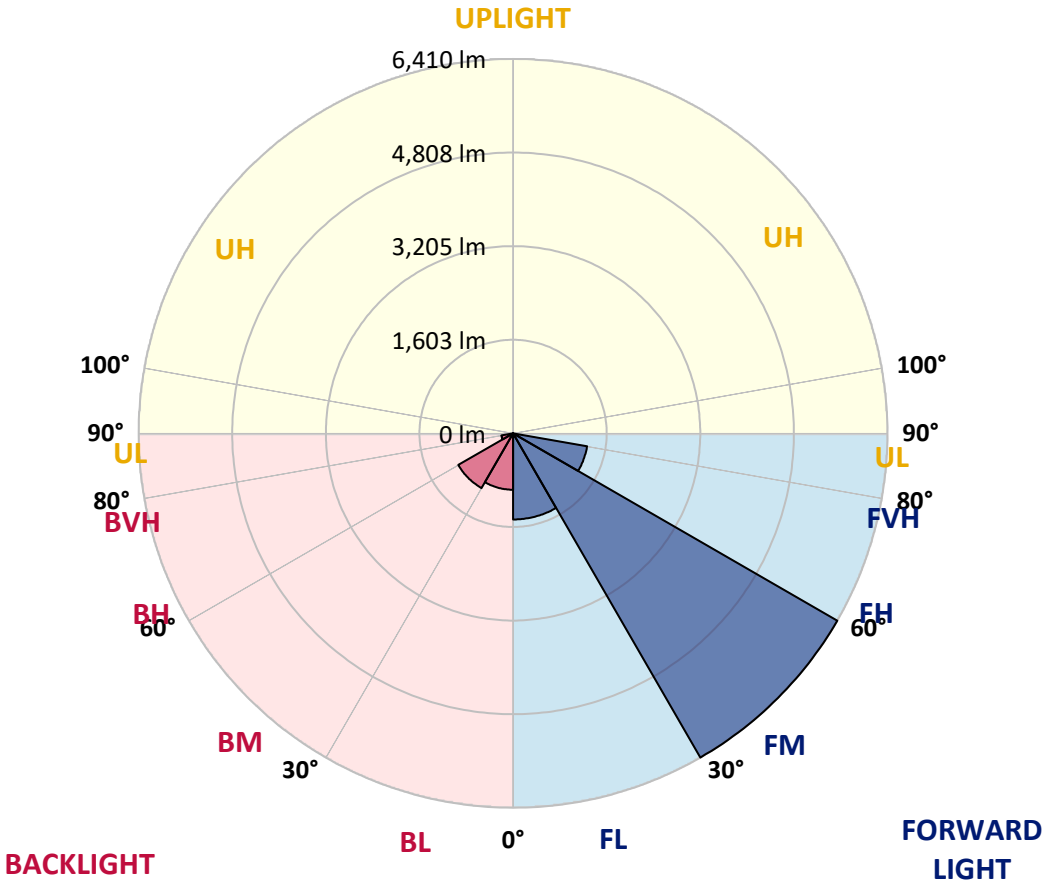
CATALOG NUMBER: GWS-SA4D-830-U-SL2-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1474.7	12.9			
FM	(30°-60°)	6410.2	56.1			
FH	(60°-80°)	1287.2	11.3			G1/1800
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	965.1	8.4	B2/1000		
BM	(30°-60°)	1082.5	9.5	B2/2500		
BH	(60°-80°)	203.2	1.8	B1/500		G1/500
BVH	(80°-90°)	0.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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REPORT NUMBER: P637974
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	4007.8	4007.8	4007.8	4007.8	4007.8	4007.8	*4007.8*	4007.8	4007.8	4007.8	4007.8
2.5°	3723.3	3726.1	3727.5	3765.2	3779.1	3834.9	*3864.2*	3879.5	3920.0	3967.4	4006.4
5°	3473.7	3469.5	3476.5	3523.9	3554.6	3636.9	*3681.5*	3712.2	3801.4	3913.0	4006.4
7.5°	3256.2	3264.5	3272.9	3324.5	3370.5	3459.8	*3523.9*	3569.9	3694.1	3860.0	4017.6
10°	3102.8	3102.8	3115.3	3173.9	3228.3	3338.5	*3402.6*	3461.2	3609.0	3812.6	4030.1
12.5°	2989.8	2991.2	3006.6	3073.5	3136.3	3250.6	*3317.5*	3374.7	3537.9	3765.2	4032.9
15°	2936.8	2932.7	2945.2	3016.3	3086.1	3193.4	*3263.2*	3318.9	3487.7	3738.7	4046.9
17.5°	2922.9	2920.1	2929.9	2999.6	3070.7	3175.3	*3243.6*	3299.4	3480.7	3747.1	4088.7
20°	2963.3	2957.8	2953.6	3013.5	3080.5	3183.7	*3254.8*	3317.5	3514.2	3793.1	4152.9
22.5°	3059.6	3059.6	3049.8	3079.1	3123.7	3217.1	*3291.0*	3373.3	3602.0	3885.1	4247.7
25°	3236.7	3222.7	3204.6	3217.1	3211.6	3270.1	*3358.0*	3472.3	3768.0	4037.1	4363.4
27.5°	3438.9	3451.4	3420.7	3422.1	3373.3	3352.4	*3454.2*	3627.1	4014.8	4251.9	4534.9
30°	3713.6	3703.8	3705.2	3701.0	3588.1	3489.1	*3599.2*	3829.3	4325.8	4579.6	4758.1
32.5°	3928.3	3942.3	3988.3	4014.8	3867.0	3708.0	*3825.1*	4104.0	4680.0	4953.3	5031.4
35°	4155.6	4180.7	4274.2	4360.6	4236.5	4053.8	*4179.3*	4468.0	5013.3	5322.8	5345.2
37.5°	4395.5	4445.7	4557.3	4709.3	4689.7	4528.0	*4642.3*	4896.1	5275.4	5546.0	5604.5
40°	4670.2	4719.0	4901.7	5120.6	5166.7	5130.4	*5168.1*	5315.9	5448.4	5555.7	5716.1
42.5°	4971.4	5038.4	5269.9	5562.7	5735.6	5767.7	*5679.8*	5664.5	5523.7	5444.2	5692.4
45°	5327.0	5405.1	5667.3	6046.6	6321.3	6364.5	*6212.5*	6015.9	5571.1	5361.9	5621.3
47.5°	5725.9	5799.8	6060.5	6516.5	6925.1	6941.9	*6676.9*	6360.4	5711.9	5456.7	5675.7
50°	5859.7	5905.8	6131.7	6667.2	7420.2	7548.5	*7165.0*	6748.0	5995.0	5735.6	5940.6
52.5°	5399.5	5417.7	5614.3	6155.4	7319.8	8143.9	*7877.6*	7326.8	6498.4	6160.9	6349.2
55°	*4278.4*	*4249.1*	*4408.0*	*4904.5*	*6361.8*	*8022.6*	*8523.2*	*8236.0*	*7146.9*	*6660.2*	*6880.5*
57.5°	2992.6	2957.8	2921.5	3257.6	4746.9	6801.0	*7853.9*	8362.9	7764.6	7155.2	7453.7
60°	2459.9	2426.4	2250.7	2095.9	2869.9	4883.6	*6032.7*	6990.7	7714.4	7130.1	7435.5
62.5°	2125.2	2105.7	2034.6	1824.0	1688.8	2787.6	*3777.7*	4695.3	5919.7	5599.0	5615.7
65°	1669.2	1663.7	1712.5	1734.8	1493.5	1542.3	*1927.2*	2440.4	3200.4	3017.7	2861.5
67.5°	1140.7	1128.2	1220.2	1500.5	1436.3	1217.4	*1128.2*	1137.9	1384.7	846.5	672.2
70°	725.1	695.9	697.3	930.1	1168.6	960.8	*870.2*	765.6	688.9	125.5	142.2
72.5°	464.4	446.2	383.5	419.7	541.1	468.6	*472.7*	407.2	271.9	66.9	78.1
75°	195.2	179.9	138.1	110.2	108.8	68.3	*60.0*	55.8	37.7	37.7	40.4
77.5°	1.4	0.0	0.0	1.4	2.8	1.4	*1.4*	2.8	5.6	8.4	9.8
80°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	1.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	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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Scaled Data Report

REPORT NUMBER: P637974
CATALOG NUMBER: GWS-SA4D-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4007.8	4007.8	4007.8	4007.8	4007.8	4007.8	4007.8	4007.8	4007.8	4007.8	4007.8
2.5°	4030.1	3996.7	4034.3	4048.3	4046.9	4048.3	4007.8	3979.9	3978.5	3943.7	3926.9
5°	4045.5	4019.0	4046.9	4028.7	3985.5	3931.1	3858.6	3795.9	3768.0	3727.5	3708.0
7.5°	4074.8	4046.9	4042.7	3970.2	3862.8	3748.4	3620.1	3505.8	3444.4	3370.5	3374.7
10°	4095.7	4063.6	4009.2	3861.4	3682.9	3500.2	3309.2	3139.0	3031.7	2932.7	2915.9
12.5°	4104.0	4056.6	3929.7	3706.6	3455.6	3217.1	2936.8	2694.2	2526.9	2397.2	2379.0
15°	4119.4	4042.7	3827.9	3519.7	3175.3	2837.8	2480.8	2148.9	1927.2	1778.0	1790.6
17.5°	4143.1	4027.3	3713.6	3310.6	2874.1	2397.2	1914.7	1534.0	1330.4	1243.9	1245.3
20°	4176.6	4009.2	3588.1	3080.5	2512.9	1899.3	1338.7	1051.5	994.3	991.5	987.3
22.5°	4221.2	3991.1	3454.2	2828.1	2084.8	1330.4	891.1	801.8	825.6	871.6	879.9
25°	4274.2	3968.8	3305.0	2543.6	1617.6	873.0	668.0	654.0	711.2	772.6	786.5
27.5°	4356.5	3957.6	3134.9	2220.1	1135.1	626.1	546.6	555.0	606.6	658.2	670.8
30°	4495.9	3978.5	2949.4	1857.5	729.3	499.2	474.1	486.7	514.6	541.1	552.2
32.5°	4685.6	4039.9	2769.5	1461.4	520.2	433.7	428.1	435.1	446.2	461.6	465.8
35°	4907.3	4145.9	2584.0	1045.9	429.5	396.0	390.5	390.5	396.0	398.8	400.2
37.5°	5090.0	4257.4	2409.7	695.9	384.9	366.8	358.4	354.2	352.8	355.6	357.0
40°	5169.5	4303.5	2220.1	506.2	352.8	340.3	327.7	315.2	315.2	324.9	326.3
42.5°	5113.7	4251.9	2001.1	418.4	330.5	312.4	292.8	281.7	287.3	297.0	299.8
45°	4995.1	4125.0	1759.9	369.5	308.2	284.5	262.2	255.2	260.8	273.3	276.1
47.5°	4975.6	4041.3	1471.2	337.5	284.5	260.8	237.1	230.1	237.1	246.8	249.6
50°	5169.5	4113.8	1150.5	309.6	262.2	235.7	216.1	209.2	213.4	218.9	221.7
52.5°	5523.7	4382.9	928.7	283.1	235.7	210.6	198.0	189.7	189.7	195.2	196.6
55°	*6046.6*	*4852.9*	*801.8*	*252.4*	*205.0*	*191.0*	*179.9*	*171.5*	*171.5*	*174.3*	*175.7*
57.5°	6649.0	5421.9	831.1	212.0	179.9	172.9	163.2	156.2	159.0	159.0	159.0
60°	6565.4	5380.0	889.7	178.5	159.0	156.2	147.8	145.0	152.0	146.4	143.6
62.5°	4836.2	3716.4	465.8	146.4	136.7	133.9	128.3	133.9	143.6	128.3	122.7
65°	2348.4	1798.9	186.9	119.9	115.7	113.0	110.2	118.5	124.1	100.4	94.8
67.5°	552.2	449.0	121.3	101.8	96.2	90.6	93.4	94.8	90.6	68.3	65.5
70°	143.6	140.8	94.8	85.1	76.7	71.1	71.1	69.7	60.0	43.2	40.4
72.5°	78.1	76.7	68.3	64.1	53.0	47.4	48.8	43.2	33.5	25.1	23.7
75°	39.0	41.8	39.0	36.3	29.3	26.5	26.5	23.7	16.7	9.8	9.8
77.5°	8.4	9.8	9.8	8.4	7.0	5.6	5.6	7.0	2.8	0.0	0.0
80°	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	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

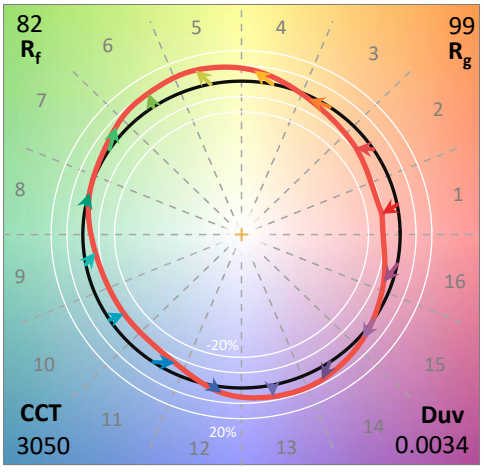
Test Information

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

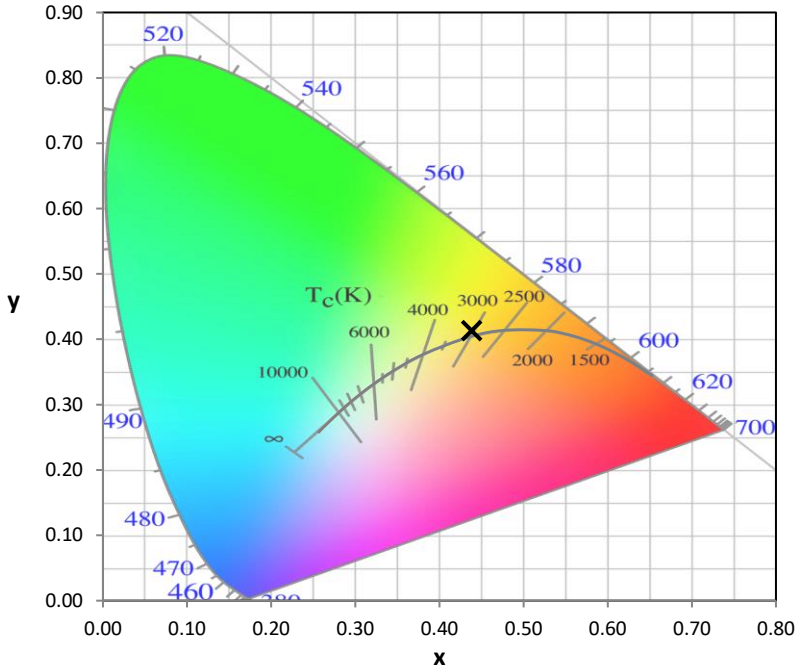
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

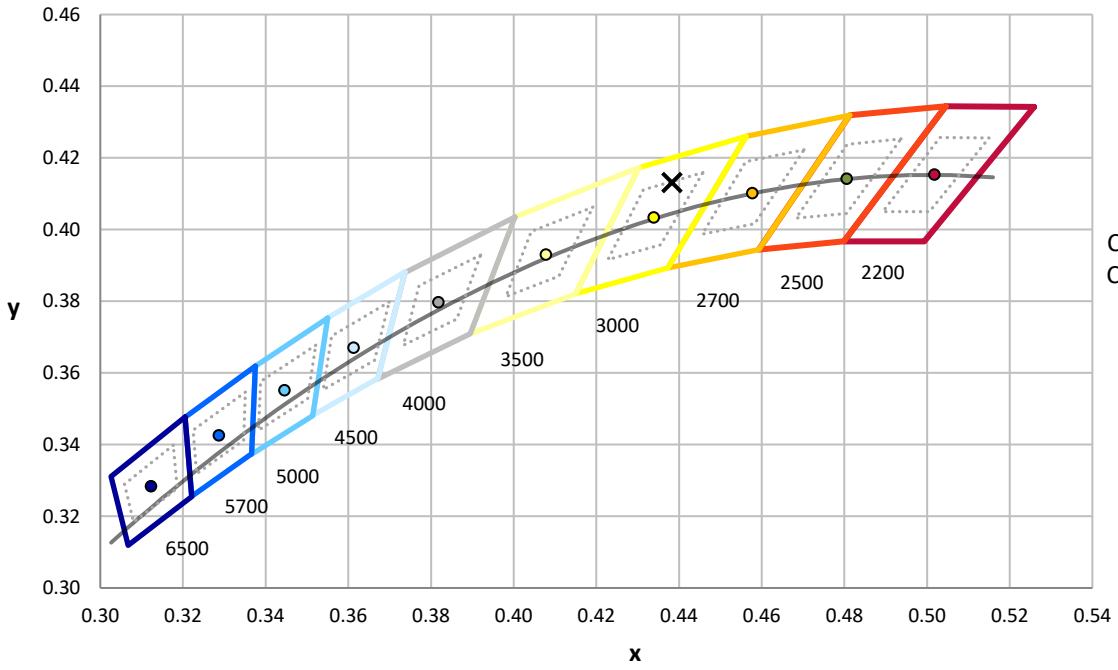
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

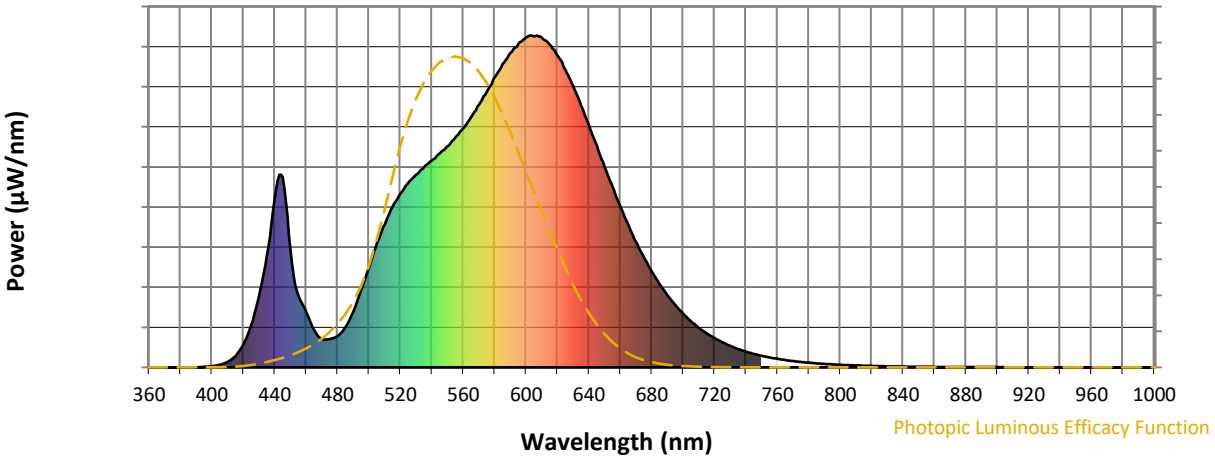


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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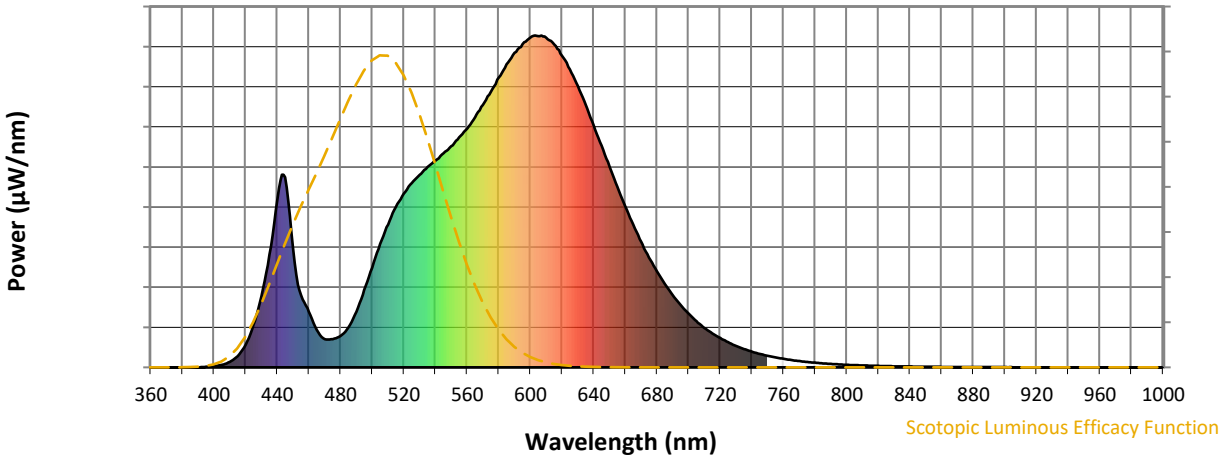
Scotopic Flux vs. Wavelength



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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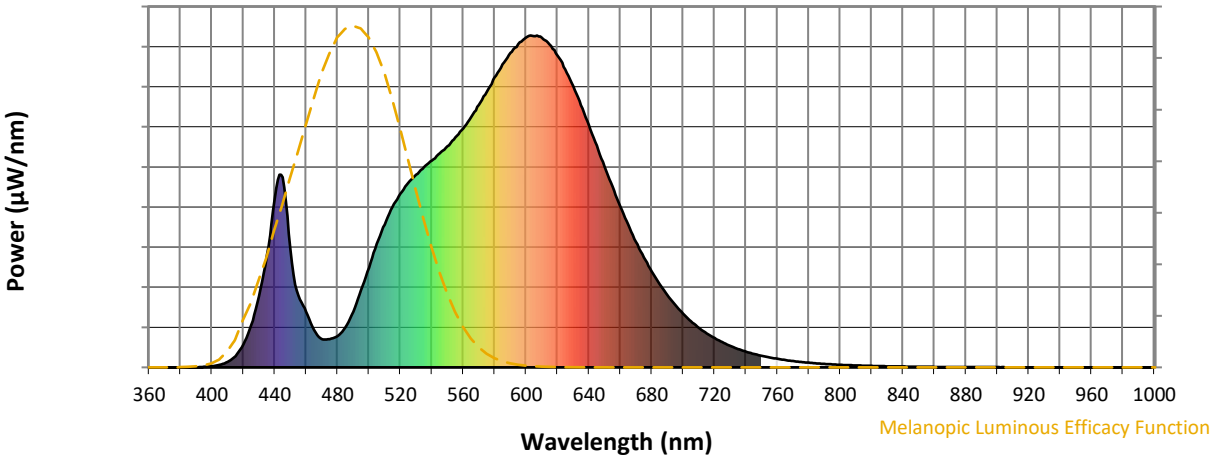
Melanopic Flux vs. Wavelength



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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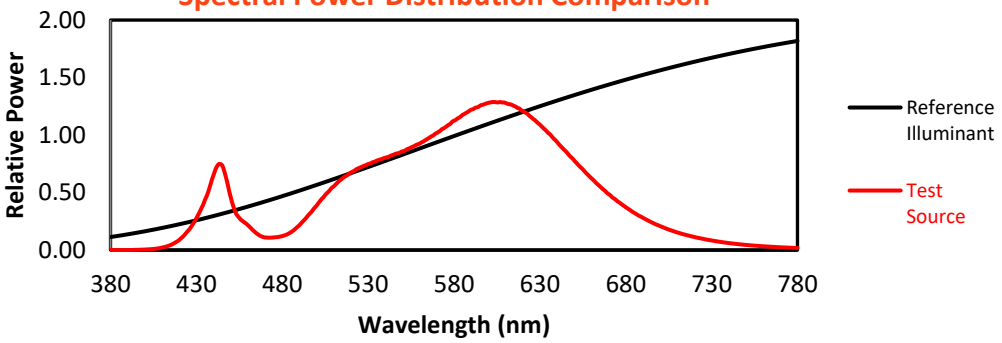
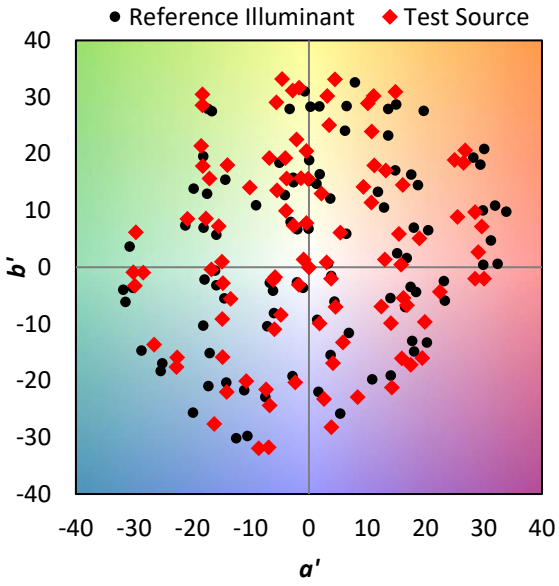
Summary

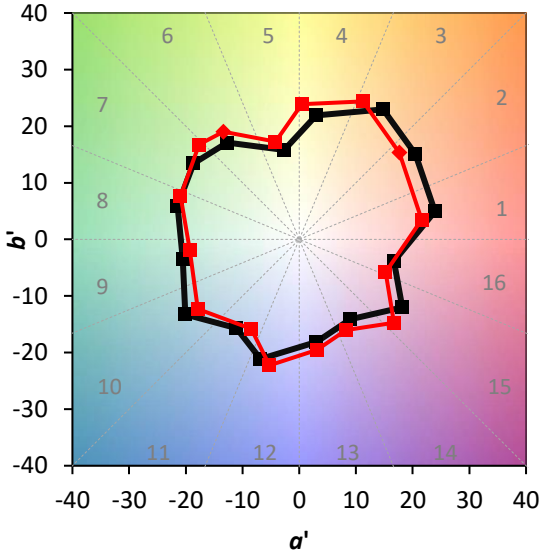
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

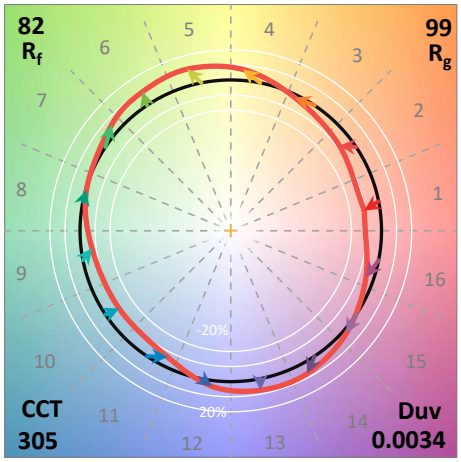
Spectral Power Distribution Comparison

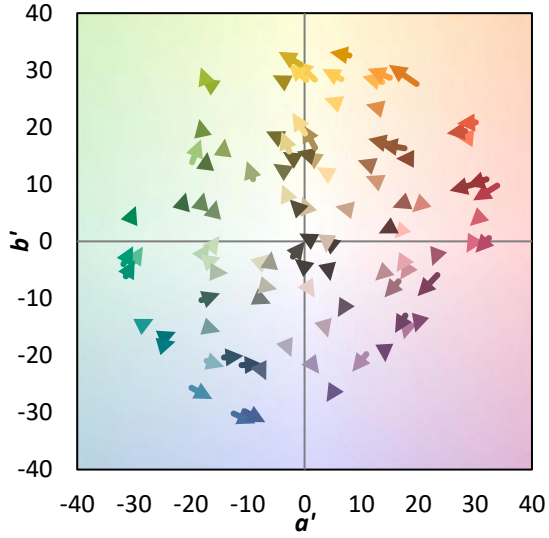


Color Vector Graphics









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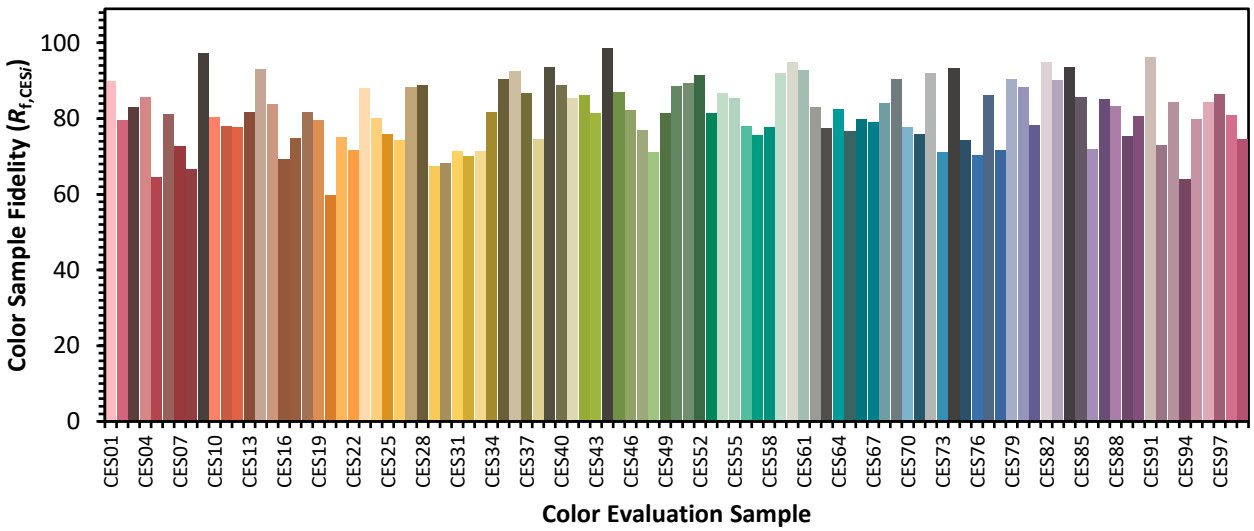
Individual Sample Fidelity Index ($R_{f,i}$)

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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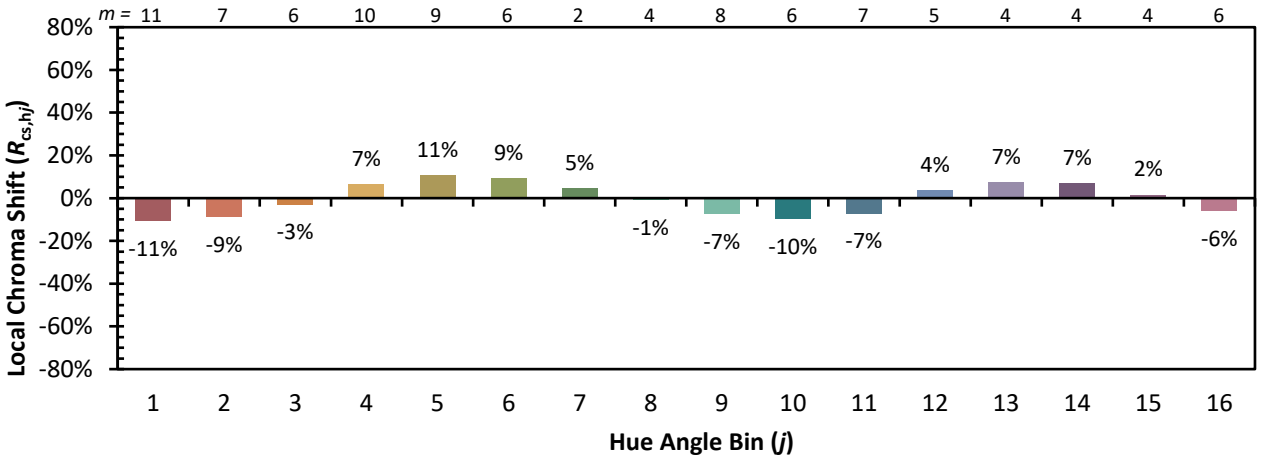
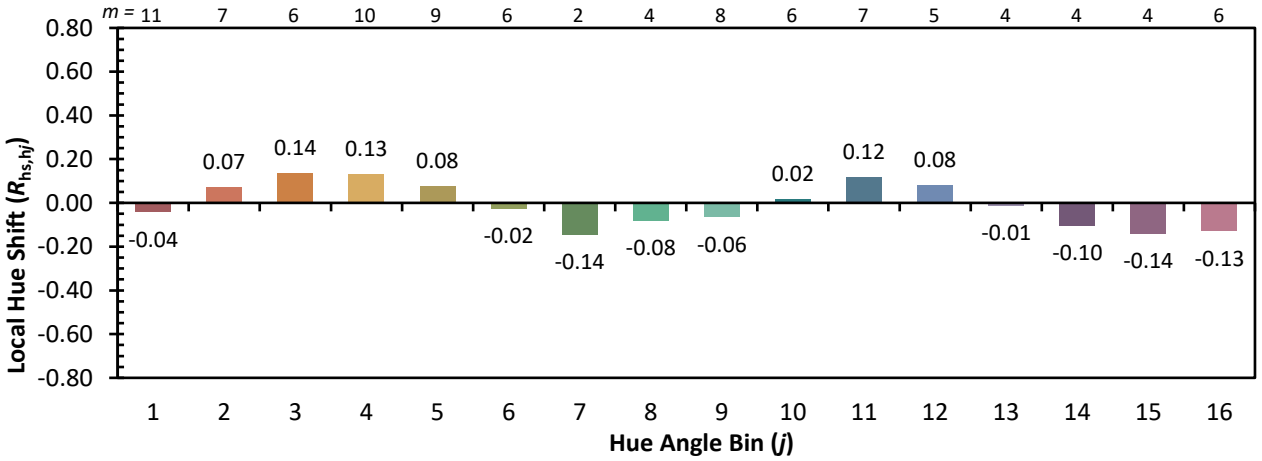
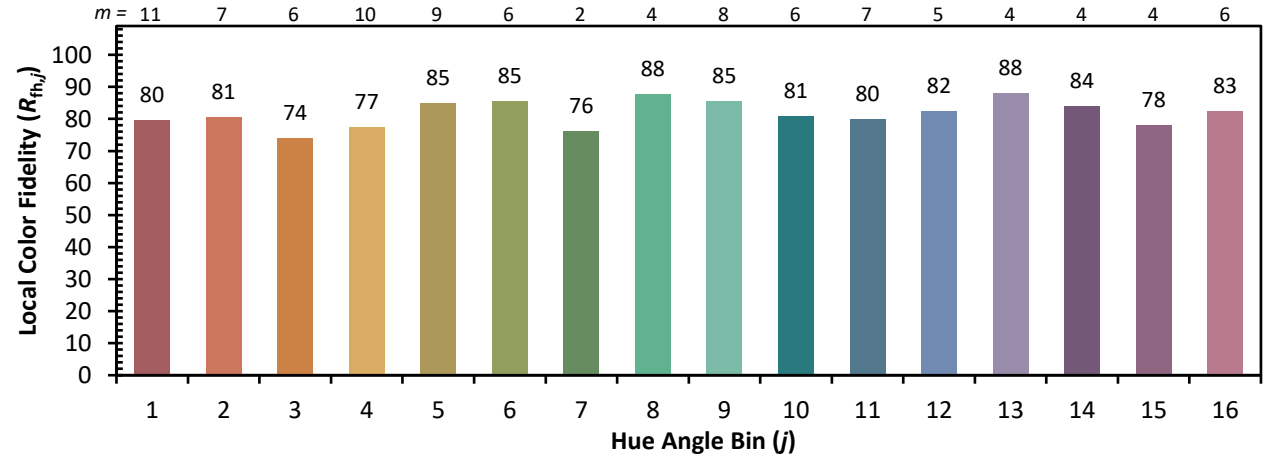
Color Rendition by Hue-Angle Bin







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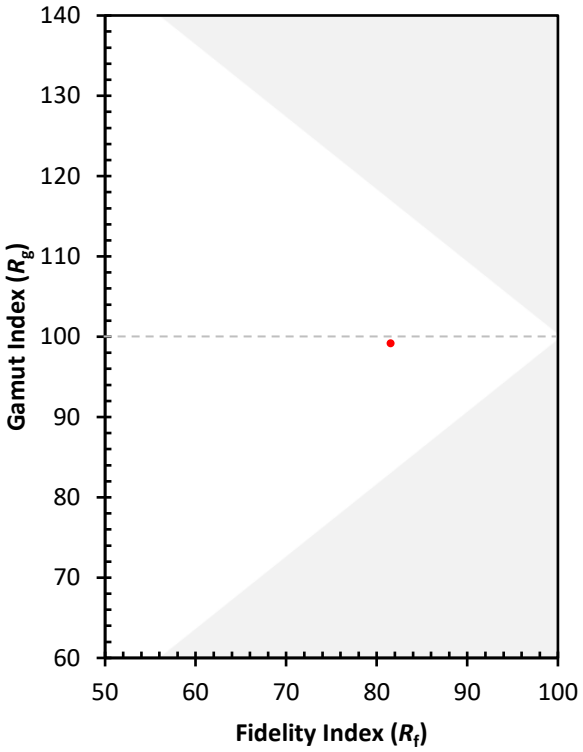
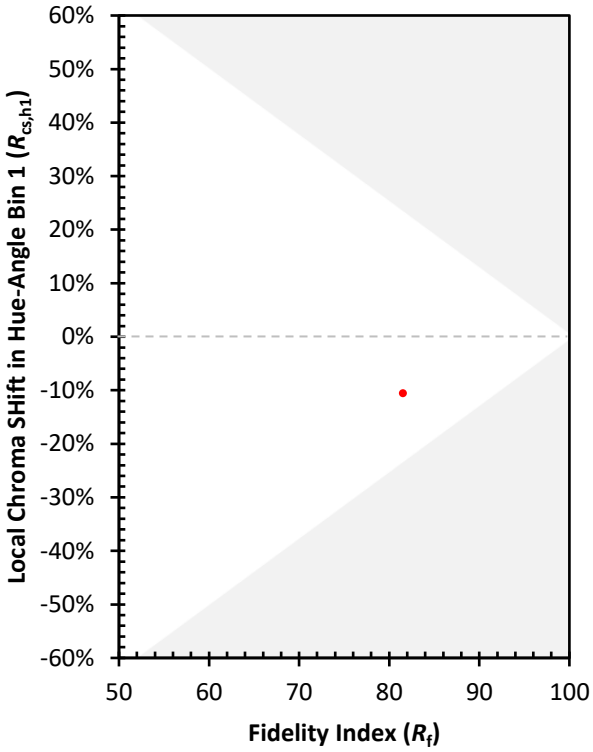
Measure Comparisons





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