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: P637479

Luminaire Tested: GWS-SA4C-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:	P637479
	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-SA4C-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:	9054.7 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):	128.5
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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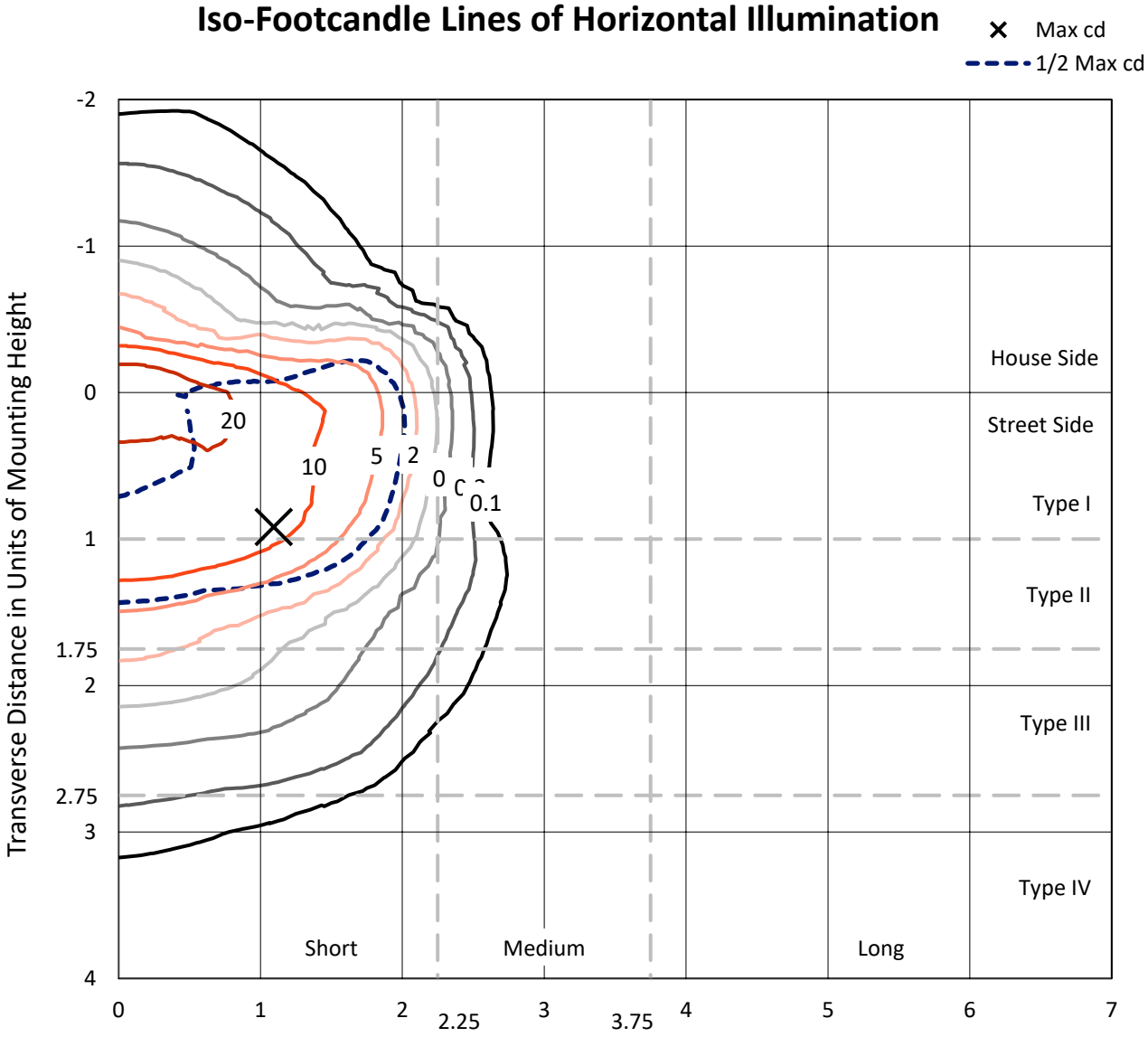
Scaled Data Report

REPORT NUMBER: P637479
CATALOG NUMBER: GWS-SA4C-830-U-SL2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 31.8 fc
Type II - Short - N/A

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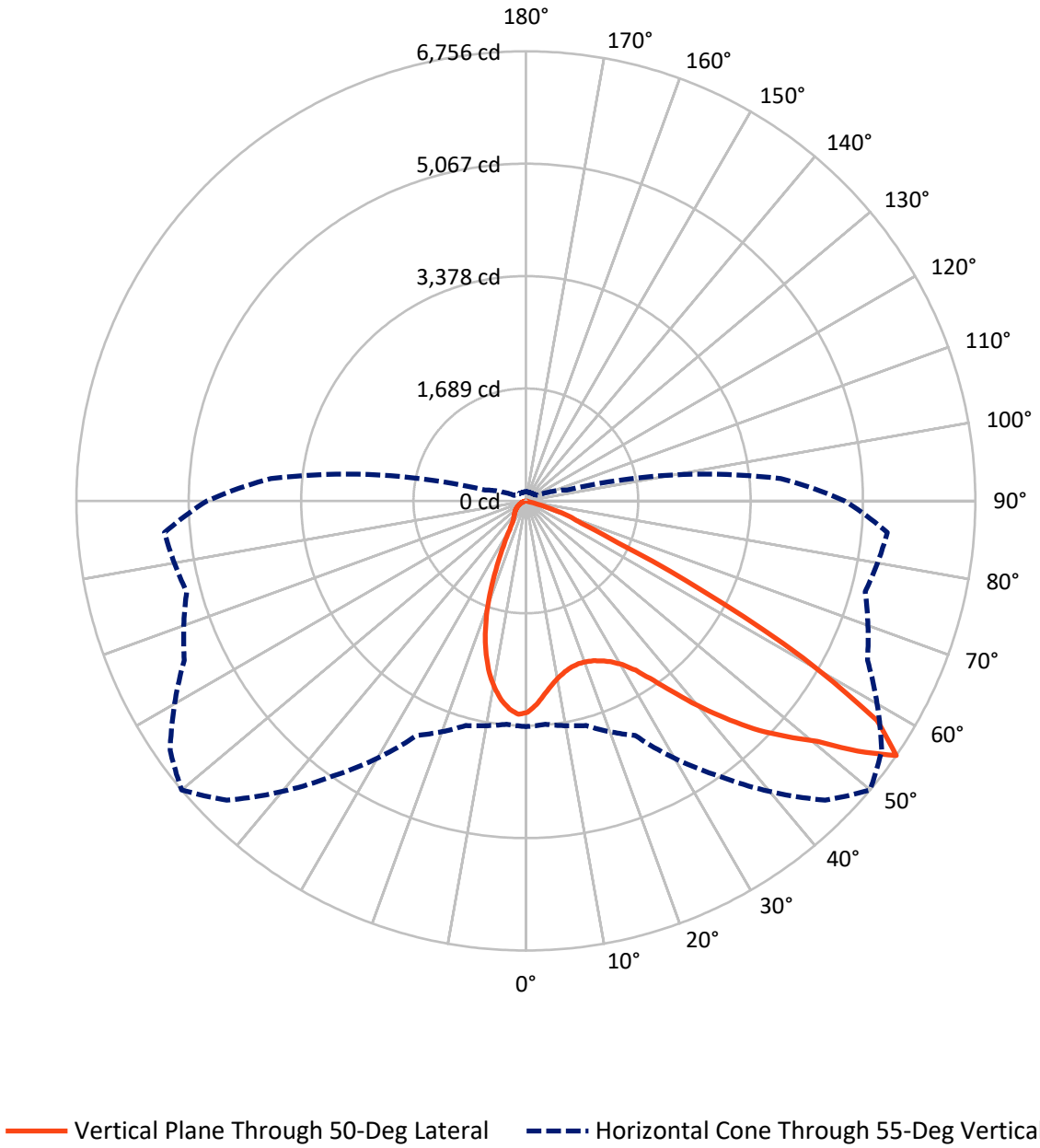
Luminous Intensity Polar Plot



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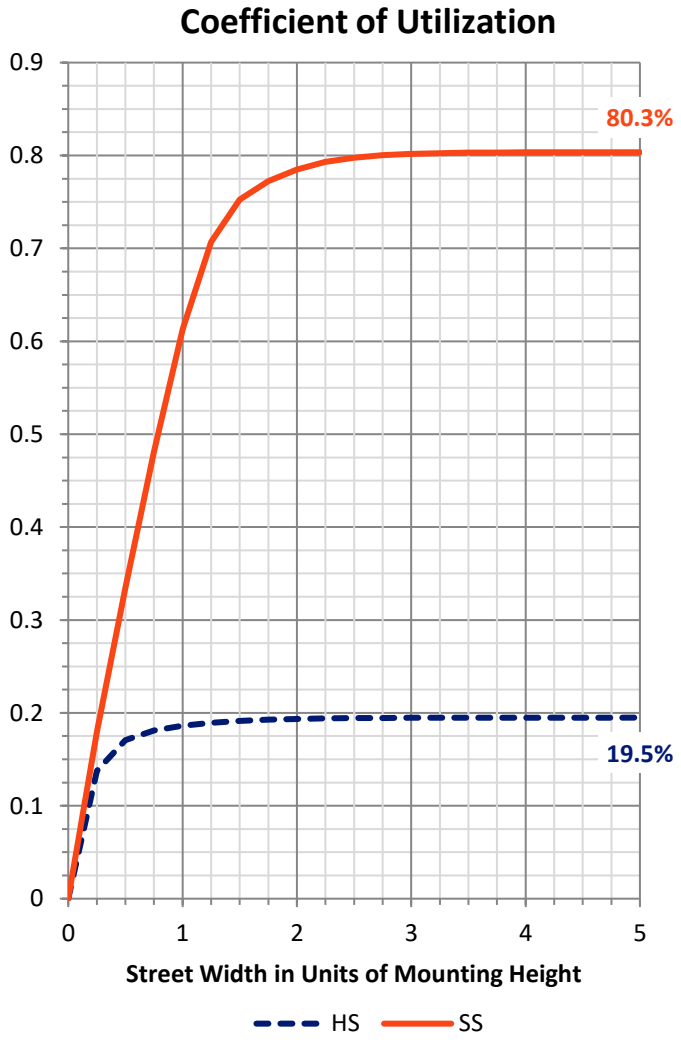
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1784.2	0.0	1784.2
	% Fixture	19.7	0.0	19.7
Street Side	Lumens	7270.5	0.0	7270.5
	% Fixture	80.3	0.0	80.3
Total	Lumens	9054.7	0.0	9054.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.0	3.1
10°-20°	686.6	7.6
20°-30°	968.4	10.7
30°-40°	1433.1	15.8
40°-50°	2067.5	22.8
50°-60°	2438.7	26.9
60°-70°	1087.9	12.0
70°-80°	93.5	1.0
80°-90°	0.0	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°	9054.7	100.0
0°-180°	9054.7	100.0



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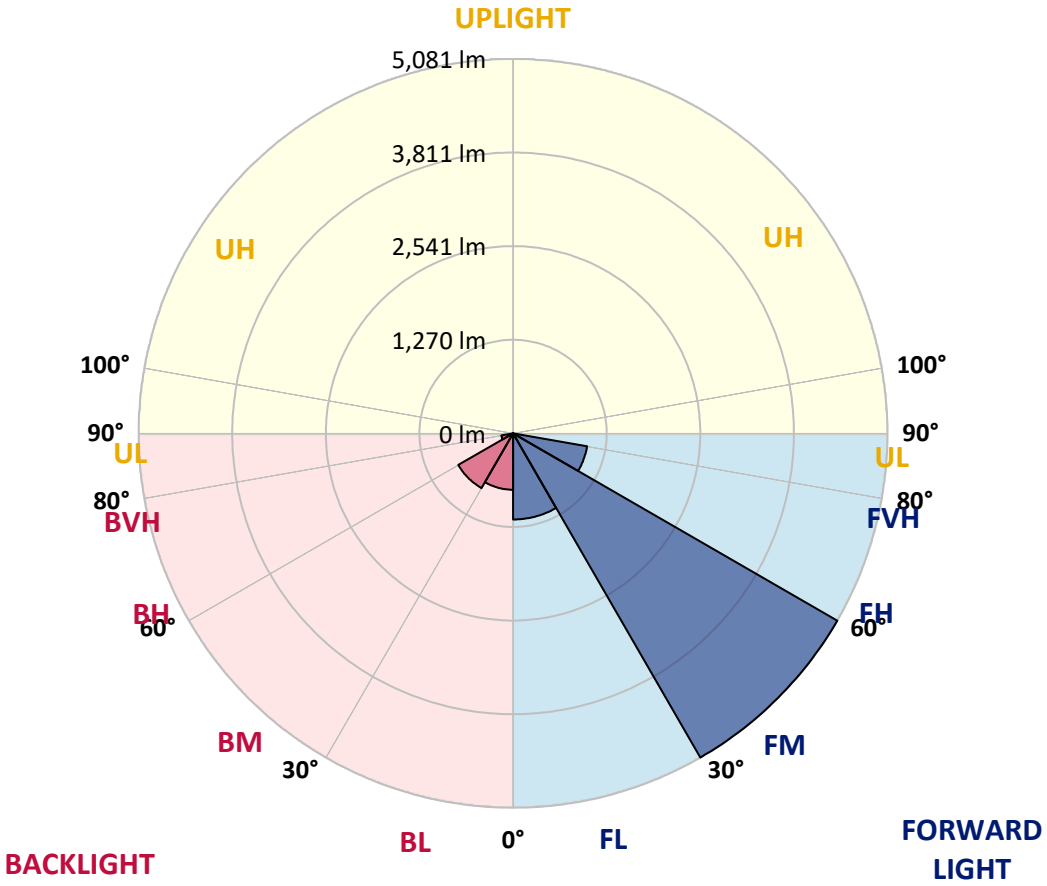
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1169.0	12.9			
FM	(30°-60°)	5081.2	56.1			
FH	(60°-80°)	1020.3	11.3			G1/1800
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	765.0	8.4	B2/1000		
BM	(30°-60°)	858.1	9.5	B1/1000		
BH	(60°-80°)	161.1	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: P637479
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	3176.9	3176.9	3176.9	3176.9	3176.9	3176.9	*3176.9*	3176.9	3176.9	3176.9	3176.9
2.5°	2951.4	2953.6	2954.7	2984.6	2995.6	3039.8	*3063.0*	3075.2	3107.3	3144.8	3175.8
5°	2753.5	2750.2	2755.7	2793.3	2817.6	2882.9	*2918.2*	2942.5	3013.3	3101.7	3175.8
7.5°	2581.1	2587.7	2594.4	2635.3	2671.7	2742.5	*2793.3*	2829.8	2928.2	3059.7	3184.6
10°	2459.5	2459.5	2469.4	2515.9	2559.0	2646.3	*2697.2*	2743.6	2860.8	3022.1	3194.6
12.5°	2370.0	2371.1	2383.2	2436.3	2486.0	2576.7	*2629.7*	2675.0	2804.4	2984.6	3196.8
15°	2328.0	2324.6	2334.6	2391.0	2446.2	2531.3	*2586.6*	2630.8	2764.6	2963.6	3207.8
17.5°	2316.9	2314.7	2322.4	2377.7	2434.1	2517.0	*2571.1*	2615.4	2759.1	2970.2	3241.0
20°	2349.0	2344.5	2341.2	2388.7	2441.8	2523.6	*2580.0*	2629.7	2785.6	3006.7	3291.9
22.5°	2425.2	2425.2	2417.5	2440.7	2476.1	2550.1	*2608.7*	2673.9	2855.2	3079.6	3367.0
25°	2565.6	2554.6	2540.2	2550.1	2545.7	2592.1	*2661.8*	2752.4	2986.8	3200.1	3458.8
27.5°	2725.9	2735.8	2711.5	2712.6	2673.9	2657.4	*2738.1*	2875.1	3182.4	3370.3	3594.7
30°	2943.7	2935.9	2937.0	2933.7	2844.2	2765.7	*2853.0*	3035.4	3428.9	3630.1	3771.6
32.5°	3113.9	3124.9	3161.4	3182.4	3065.2	2939.2	*3032.1*	3253.2	3709.7	3926.3	3988.2
35°	3294.1	3314.0	3388.0	3456.6	3358.2	3213.4	*3312.9*	3541.7	3973.9	4219.3	4237.0
37.5°	3484.2	3524.0	3612.4	3732.9	3717.4	3589.2	*3679.8*	3881.0	4181.7	4396.1	4442.6
40°	3702.0	3740.6	3885.4	4059.0	4095.5	4066.7	*4096.6*	4213.7	4318.8	4403.9	4531.0
42.5°	3940.7	3993.8	4177.3	4409.4	4546.5	4571.9	*4502.3*	4490.1	4378.5	4315.4	4512.2
45°	4222.6	4284.5	4492.3	4793.0	5010.7	5045.0	*4924.5*	4768.7	4416.0	4250.2	4455.8
47.5°	4538.7	4597.3	4804.0	5165.5	5489.4	5502.6	*5292.6*	5041.7	4527.7	4325.4	4498.9
50°	4644.9	4681.3	4860.4	5284.9	5881.8	5983.5	*5679.5*	5349.0	4752.1	4546.5	4709.0
52.5°	4280.1	4294.4	4450.3	4879.2	5802.2	6455.5	*6244.4*	5807.7	5151.1	4883.6	5032.8
55°	*3391.3*	*3368.1*	*3494.1*	*3887.7*	*5042.8*	*6359.3*	*6756.1*	*6528.4*	*5665.1*	*5279.3*	*5454.0*
57.5°	2372.2	2344.5	2315.8	2582.2	3762.7	5391.0	*6225.6*	6629.0	6154.8	5671.8	5908.3
60°	1949.9	1923.4	1784.1	1661.4	2274.9	3871.1	*4781.9*	5541.3	6115.0	5651.9	5893.9
62.5°	1684.6	1669.1	1612.8	1445.9	1338.6	2209.7	*2994.5*	3721.8	4692.4	4438.1	4451.4
65°	1323.2	1318.7	1357.4	1375.1	1183.9	1222.6	*1527.6*	1934.4	2536.9	2392.1	2268.3
67.5°	904.2	894.3	967.2	1189.4	1138.6	965.0	*894.3*	902.0	1097.7	671.0	532.8
70°	574.8	551.6	552.7	737.3	926.3	761.6	*689.8*	606.9	546.1	99.5	112.7
72.5°	368.1	353.7	304.0	332.7	428.9	371.4	*374.7*	322.8	215.6	53.1	61.9
75°	154.8	142.6	109.4	87.3	86.2	54.2	*47.5*	44.2	29.8	29.8	32.1
77.5°	1.1	0.0	0.0	1.1	2.2	1.1	*1.1*	2.2	4.4	6.6	7.7
80°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	1.1
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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REPORT NUMBER: P637479
CATALOG NUMBER: GWS-SA4C-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3176.9	3176.9	3176.9	3176.9	3176.9	3176.9	3176.9	3176.9	3176.9	3176.9	3176.9
2.5°	3194.6	3168.0	3197.9	3208.9	3207.8	3208.9	3176.9	3154.8	3153.7	3126.0	3112.8
5°	3206.7	3185.7	3207.8	3193.5	3159.2	3116.1	3058.6	3008.9	2986.8	2954.7	2939.2
7.5°	3230.0	3207.8	3204.5	3147.0	3061.9	2971.3	2869.6	2779.0	2730.3	2671.7	2675.0
10°	3246.5	3221.1	3178.0	3060.8	2919.3	2774.5	2623.1	2488.2	2403.1	2324.6	2311.4
12.5°	3253.2	3215.6	3115.0	2938.1	2739.2	2550.1	2328.0	2135.6	2003.0	1900.2	1885.8
15°	3265.3	3204.5	3034.3	2790.0	2517.0	2249.5	1966.5	1703.4	1527.6	1409.4	1419.3
17.5°	3284.1	3192.4	2943.7	2624.2	2278.2	1900.2	1517.7	1215.9	1054.5	986.0	987.1
20°	3310.6	3178.0	2844.2	2441.8	1991.9	1505.5	1061.2	833.5	788.1	785.9	782.6
22.5°	3346.0	3163.6	2738.1	2241.7	1652.6	1054.5	706.3	635.6	654.4	690.9	697.5
25°	3388.0	3145.9	2619.8	2016.2	1282.3	692.0	529.5	518.4	563.7	612.4	623.4
27.5°	3453.2	3137.1	2484.9	1759.8	899.8	496.3	433.3	439.9	480.8	521.7	531.7
30°	3563.8	3153.7	2337.9	1472.4	578.1	395.7	375.8	385.8	407.9	428.9	437.7
32.5°	3714.1	3202.3	2195.3	1158.4	412.3	343.8	339.4	344.9	353.7	365.9	369.2
35°	3889.9	3286.3	2048.3	829.0	340.5	313.9	309.5	309.5	313.9	316.1	317.2
37.5°	4034.7	3374.8	1910.1	551.6	305.1	290.7	284.1	280.8	279.7	281.9	283.0
40°	4097.7	3411.2	1759.8	401.3	279.7	269.7	259.8	249.8	249.8	257.6	258.7
42.5°	4053.5	3370.3	1586.2	331.6	262.0	247.6	232.1	223.3	227.7	235.4	237.7
45°	3959.5	3269.7	1395.0	292.9	244.3	225.5	207.8	202.3	206.7	216.7	218.9
47.5°	3944.0	3203.4	1166.2	267.5	225.5	206.7	187.9	182.4	187.9	195.7	197.9
50°	4097.7	3260.9	911.9	245.4	207.8	186.8	171.3	165.8	169.1	173.5	175.8
52.5°	4378.5	3474.2	736.2	224.4	186.8	166.9	157.0	150.3	150.3	154.8	155.9
55°	*4793.0*	*3846.8*	*635.6*	*200.1*	*162.5*	*151.4*	*142.6*	*136.0*	*136.0*	*138.2*	*139.3*
57.5°	5270.5	4297.8	658.8	168.0	142.6	137.1	129.3	123.8	126.0	126.0	126.0
60°	5204.2	4264.6	705.2	141.5	126.0	123.8	117.2	115.0	120.5	116.1	113.9
62.5°	3833.5	2945.9	369.2	116.1	108.3	106.1	101.7	106.1	113.9	101.7	97.3
65°	1861.5	1426.0	148.1	95.1	91.7	89.5	87.3	94.0	98.4	79.6	75.2
67.5°	437.7	355.9	96.2	80.7	76.3	71.9	74.1	75.2	71.9	54.2	52.0
70°	113.9	111.6	75.2	67.4	60.8	56.4	56.4	55.3	47.5	34.3	32.1
72.5°	61.9	60.8	54.2	50.8	42.0	37.6	38.7	34.3	26.5	19.9	18.8
75°	31.0	33.2	31.0	28.7	23.2	21.0	21.0	18.8	13.3	7.7	7.7
77.5°	6.6	7.7	7.7	6.6	5.5	4.4	4.4	5.5	2.2	0.0	0.0
80°	1.1	1.1	1.1	1.1	1.1	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

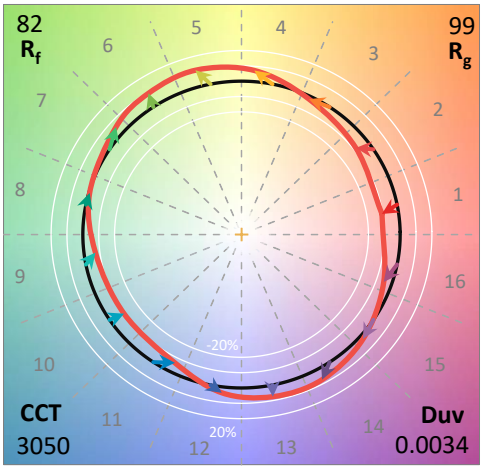
Test Information

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

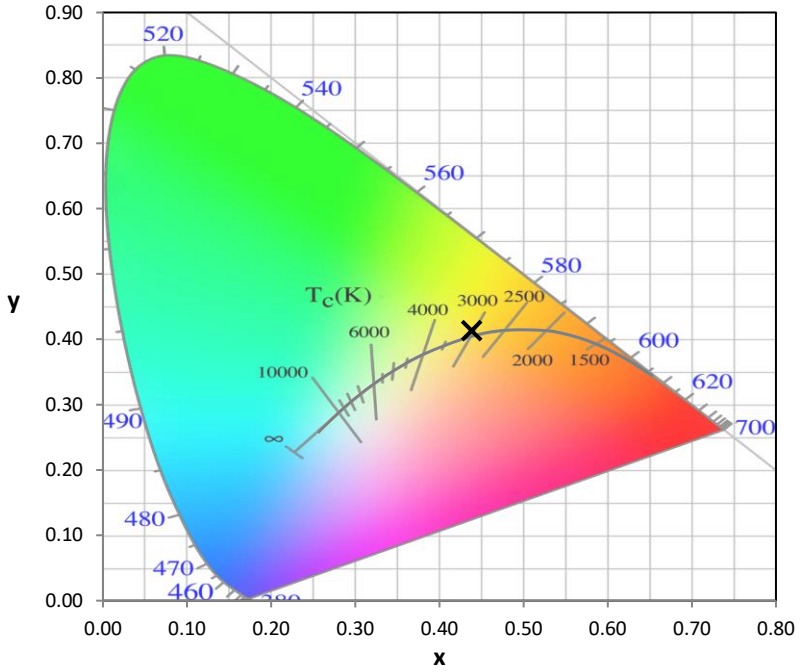
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

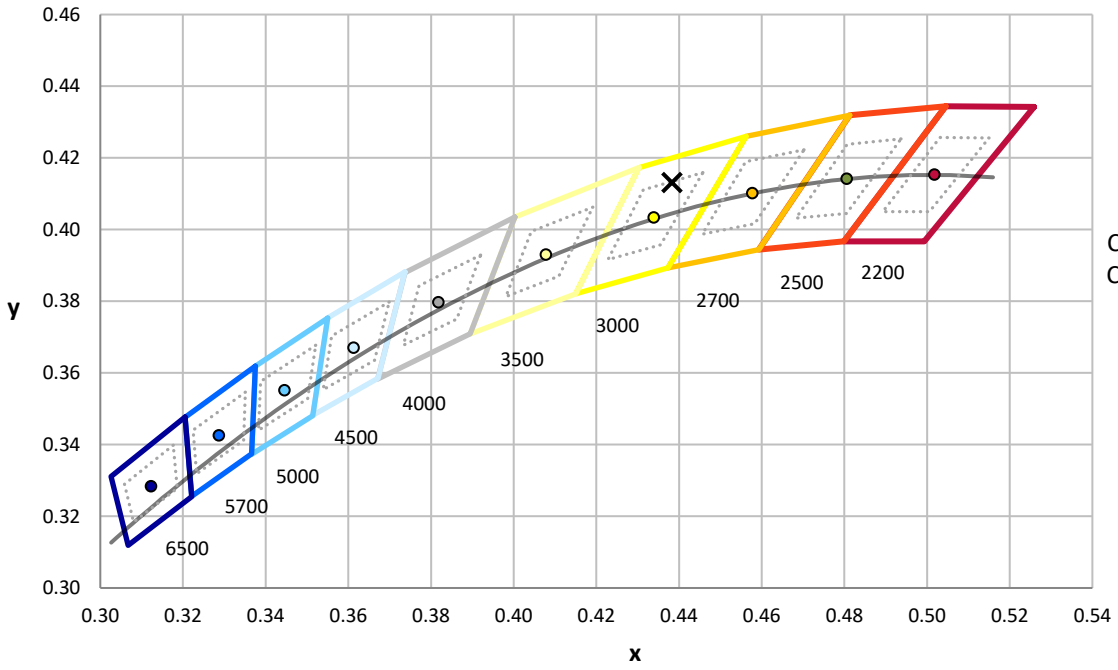
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

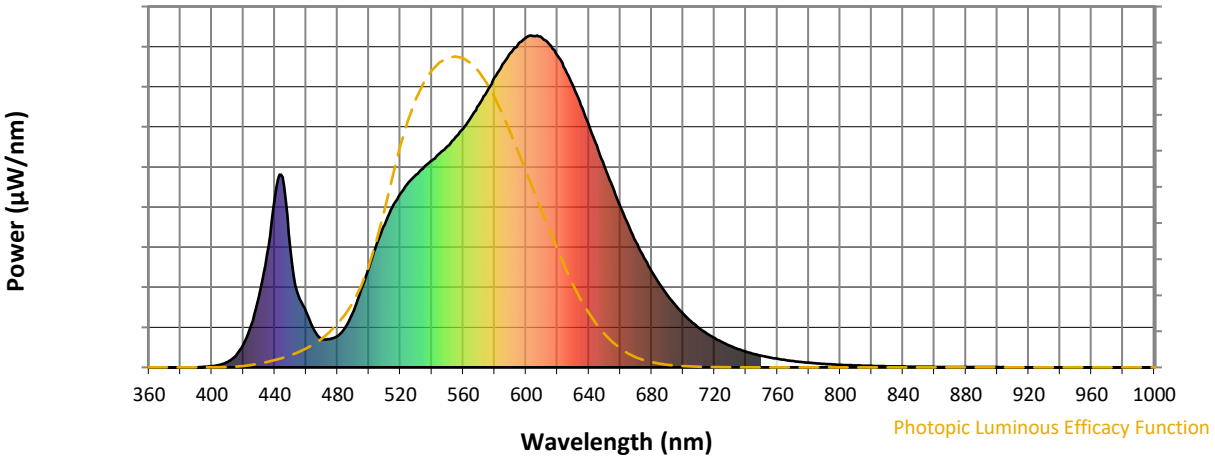


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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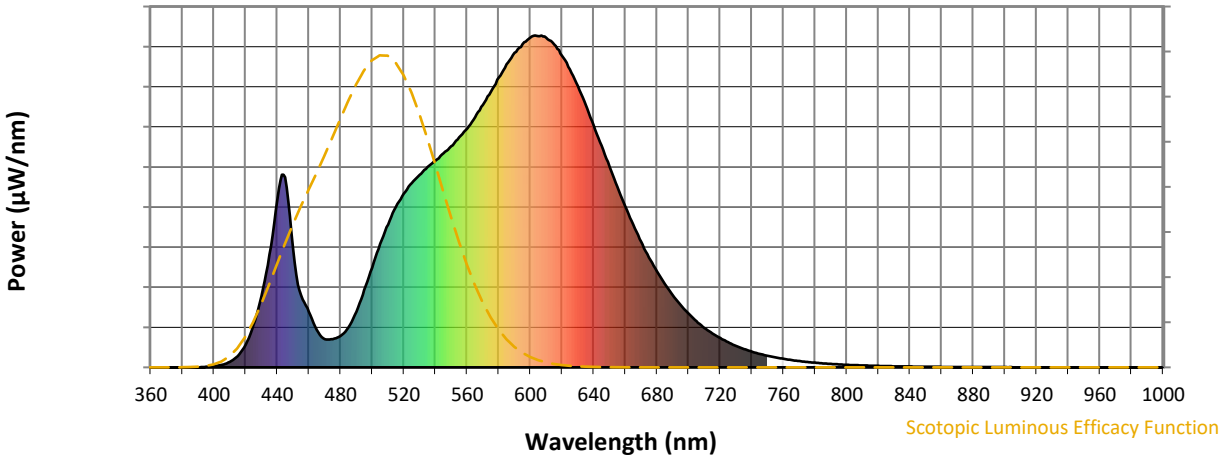
Scotopic Flux vs. Wavelength



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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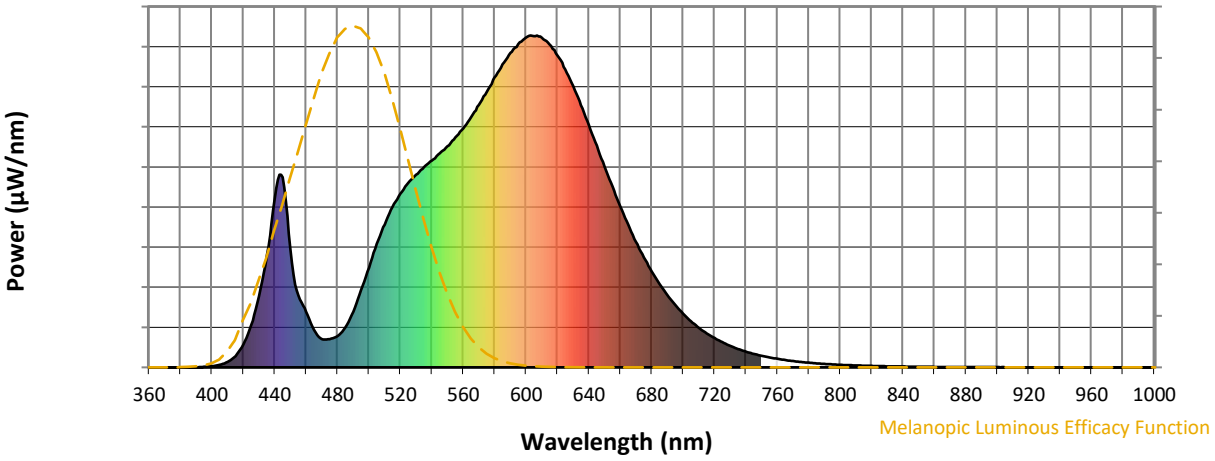
Melanopic Flux vs. Wavelength



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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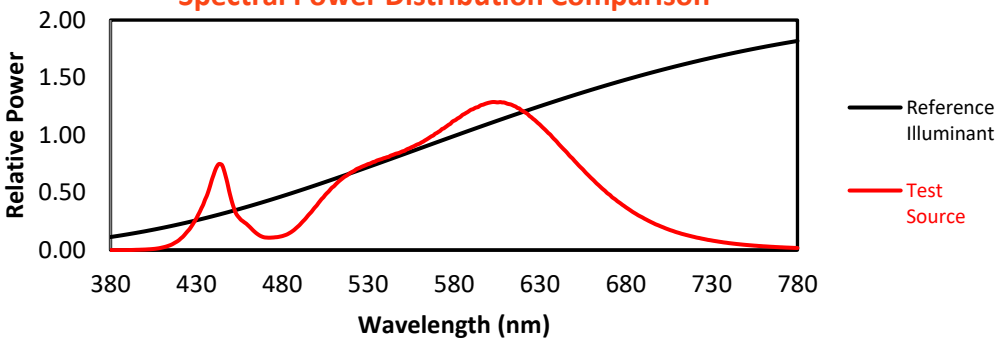
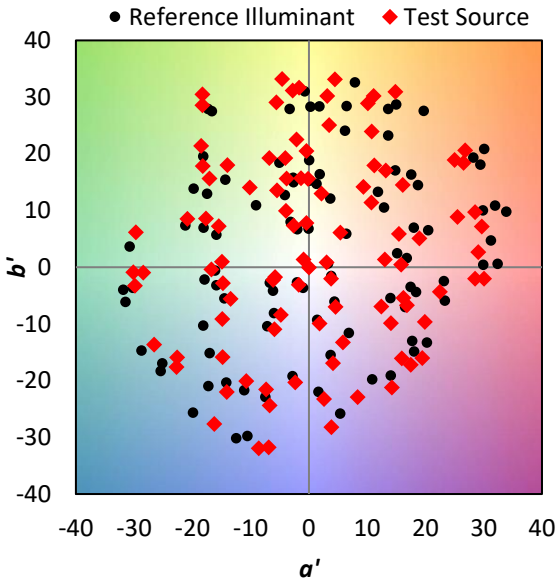
Summary

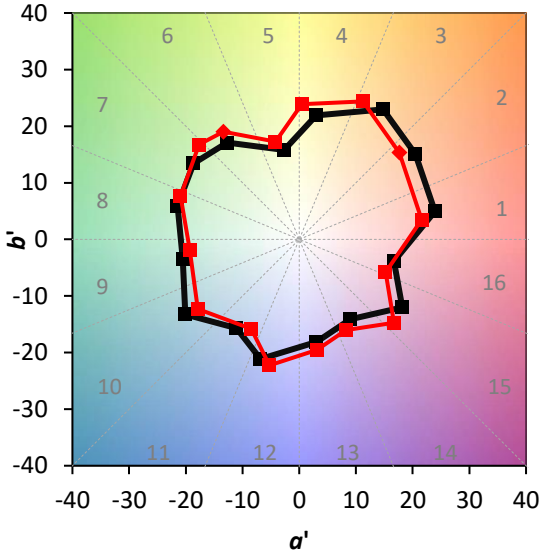
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

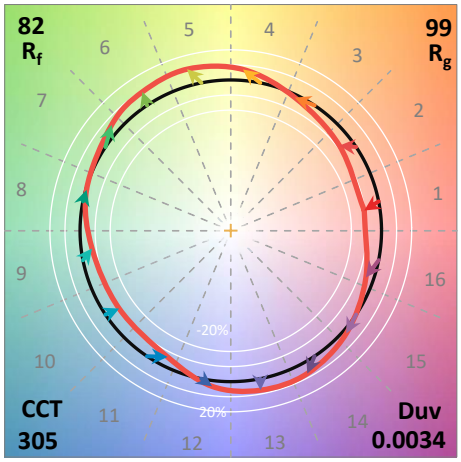
Spectral Power Distribution Comparison

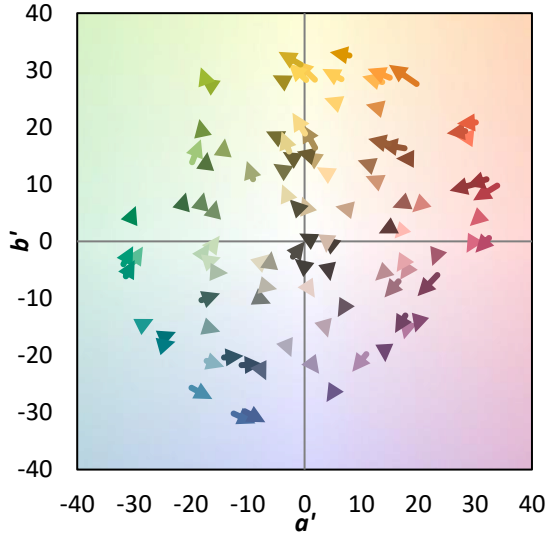


Color Vector Graphics









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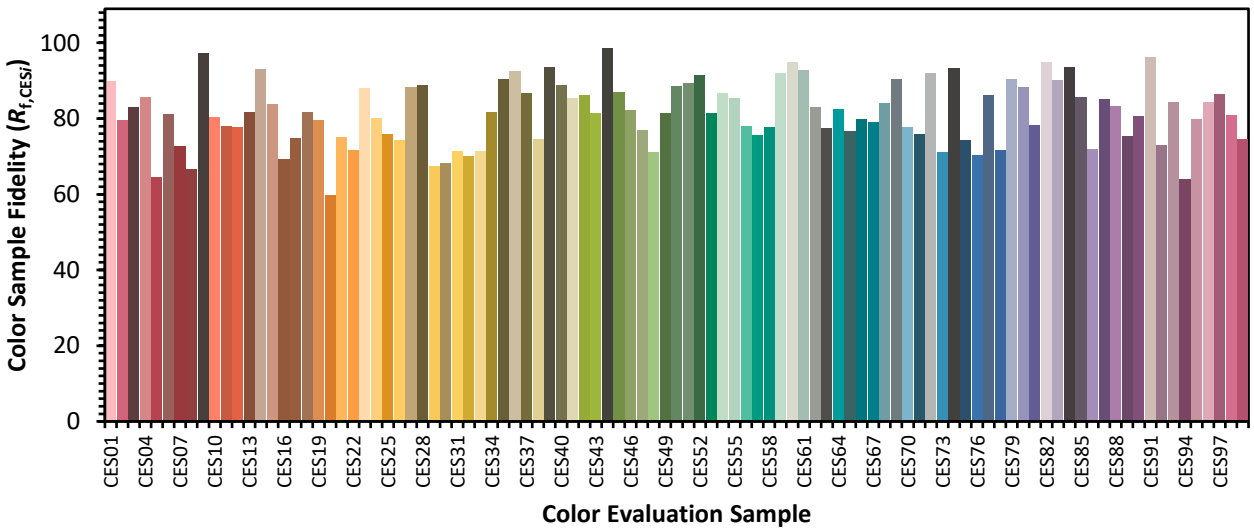
Individual Sample Fidelity Index ($R_{f,i}$)

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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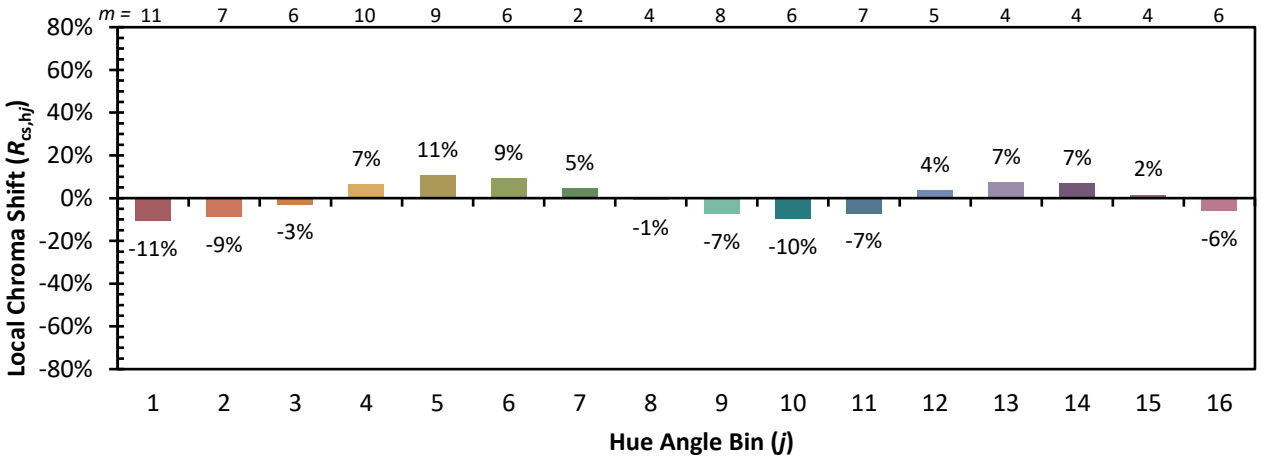
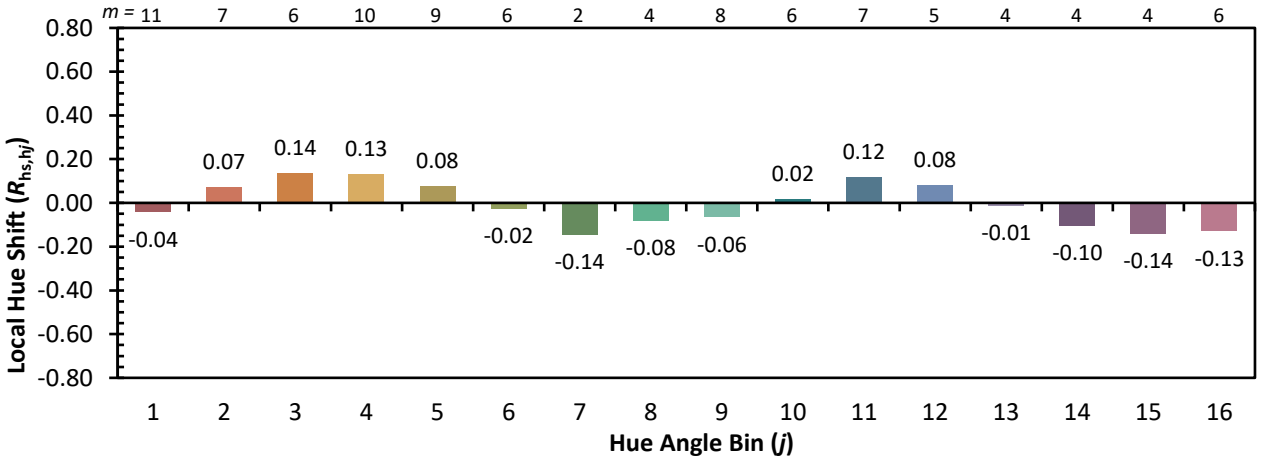
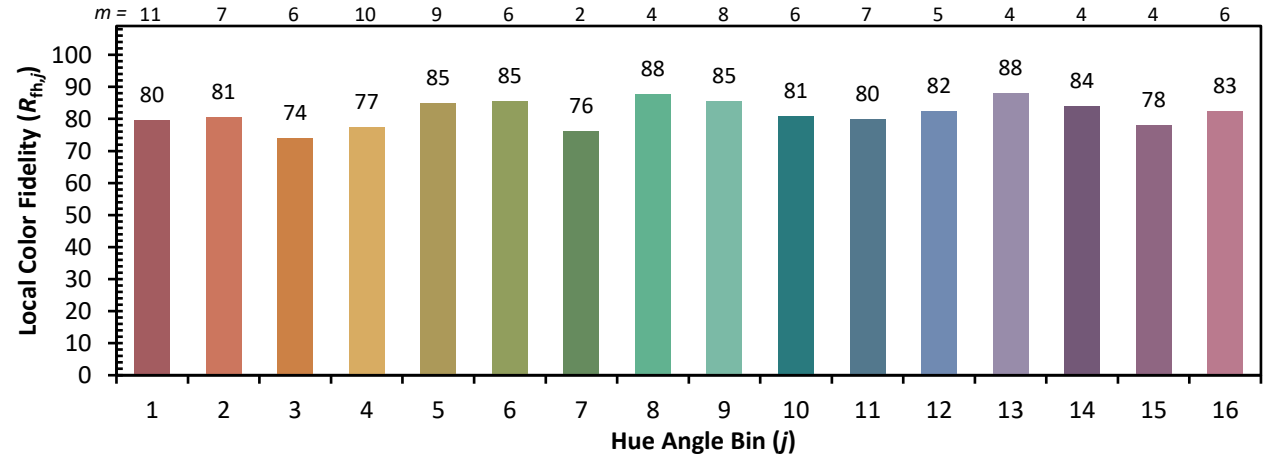
Color Rendition by Hue-Angle Bin







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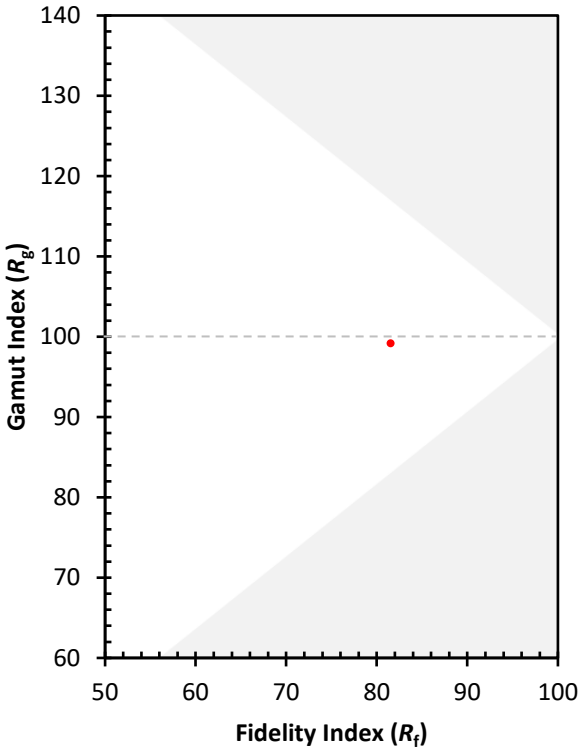
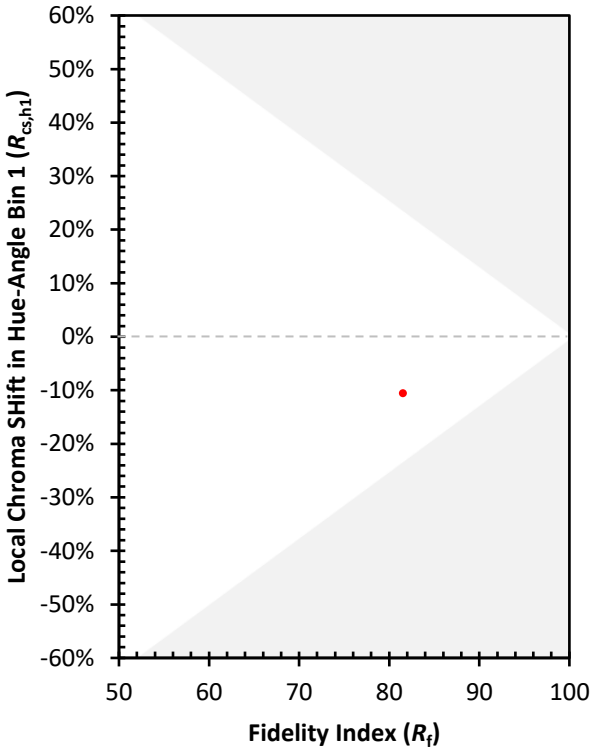
Measure Comparisons





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