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: P638004

Luminaire Tested: GWS-SA4D-830-U-T3-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:	P638004
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-23)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4D-830-U-T3-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19467 lumens
Efficiency:	N/A
Efficacy:	120.1 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G3

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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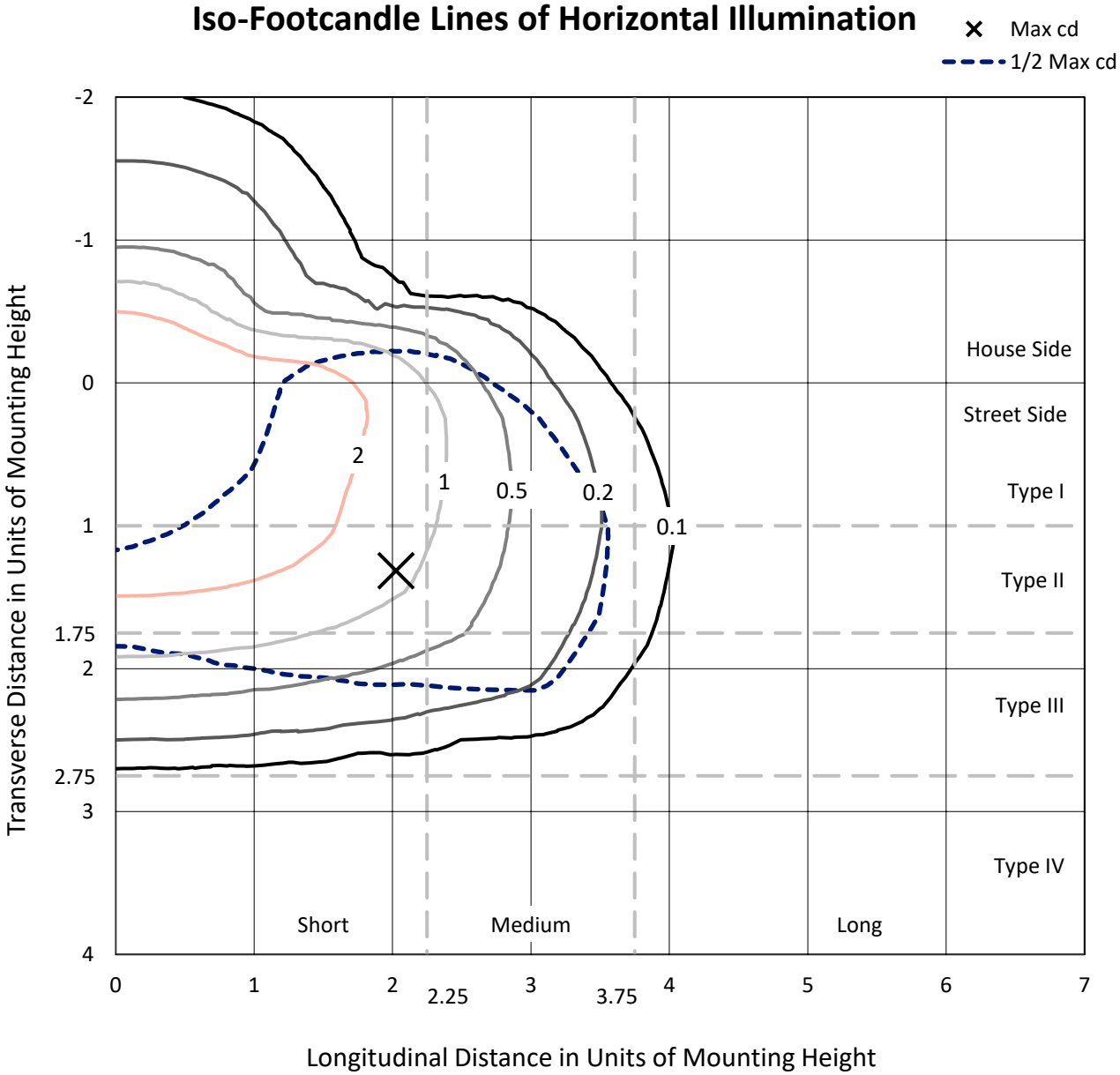
Scaled Data Report

REPORT NUMBER: P638004
CATALOG NUMBER: GWS-SA4D-830-U-T3-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
Type III - Short - N/A

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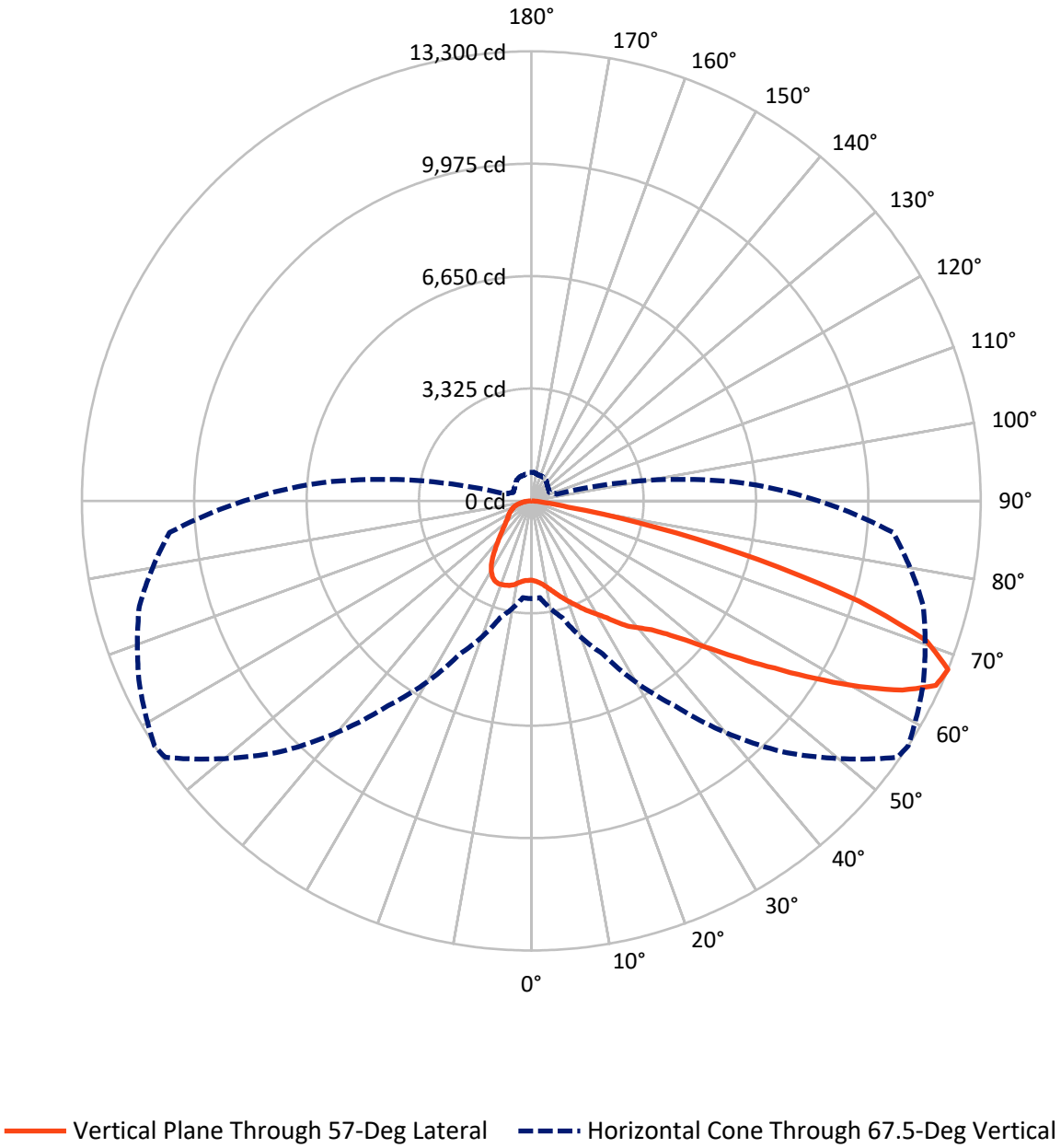
Luminous Intensity Polar Plot



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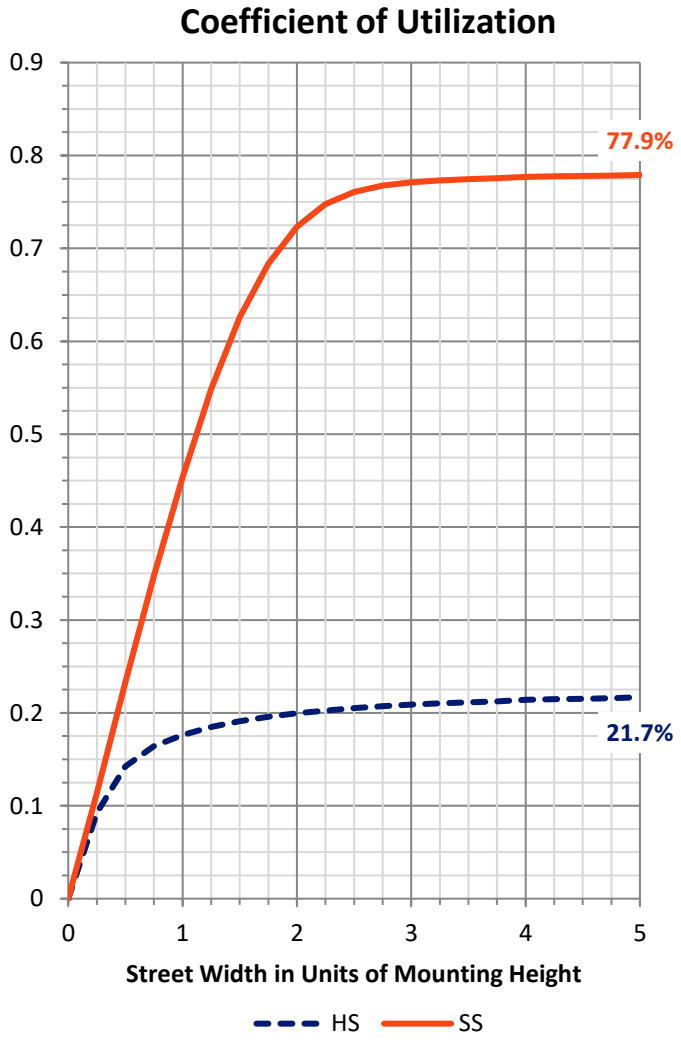
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4280.1	0.0	4280.1
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	15186.9	0.0	15186.9
	% Fixture	78.0	0.0	78.0
Total	Lumens	19467.0	0.0	19467.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.6	1.2
10°-20°	770.2	4.0
20°-30°	1373.0	7.1
30°-40°	1996.2	10.3
40°-50°	2889.2	14.8
50°-60°	4521.5	23.2
60°-70°	5274.6	27.1
70°-80°	2201.8	11.3
80°-90°	207.8	1.1
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°	19467.0	100.0
0°-180°	19467.0	100.0



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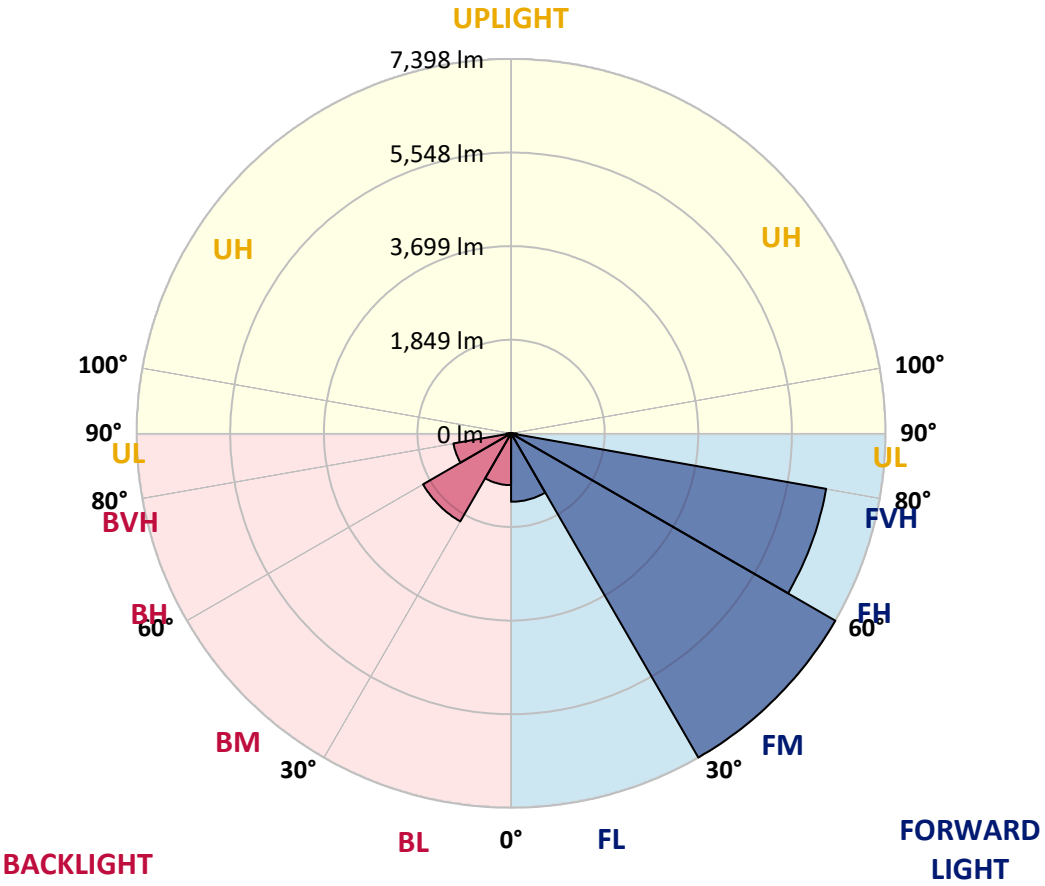
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1352.2	6.9			
FM	(30°-60°)	7397.7	38.0			
FH	(60°-80°)	6321.3	32.5			G3/7500
FVH	(80°-90°)	115.8	0.6			G2/225
BL	(0°-30°)	1023.7	5.3	B3/2500		
BM	(30°-60°)	2009.2	10.3	B2/2500		
BH	(60°-80°)	1155.2	5.9	B3/2500		G3/2500
BVH	(80°-90°)	92.0	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type III Short



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REPORT NUMBER: P638004
CATALOG NUMBER: GWS-SA4D-830-U-T3-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6
2.5°	2379.1	2376.3	2374.9	2383.3	2380.5	2379.1	2379.1	2377.7	2374.9	2363.8	2348.4
5°	2444.7	2439.1	2433.5	2440.5	2434.9	2429.3	2427.9	2425.1	2415.4	2398.6	2374.9
7.5°	2513.0	2507.4	2508.8	2513.0	2508.8	2506.0	2501.8	2499.0	2483.7	2457.2	2425.1
10°	2609.2	2609.2	2612.0	2616.2	2617.6	2613.4	2605.0	2600.8	2582.7	2549.2	2504.6
12.5°	2748.7	2745.9	2745.9	2743.1	2747.3	2743.1	2734.7	2727.7	2705.4	2662.2	2598.1
15°	2932.7	2921.6	2911.8	2893.7	2888.1	2872.8	2875.6	2871.4	2850.5	2791.9	2711.0
17.5°	3129.4	3128.0	3112.6	3076.4	3040.1	3015.0	3020.6	3019.2	3008.1	2928.6	2825.4
20°	3302.3	3309.3	3295.3	3267.4	3218.6	3171.2	3168.4	3175.4	3161.5	3082.0	2938.3
22.5°	3496.1	3490.6	3476.6	3440.4	3404.1	3353.9	3337.2	3331.6	3326.0	3235.4	3054.1
25°	3680.2	3697.0	3678.8	3645.4	3589.6	3535.2	3521.3	3526.8	3511.5	3391.6	3178.2
27.5°	3913.1	3920.1	3908.9	3862.9	3815.5	3738.8	3712.3	3712.3	3706.7	3538.0	3275.8
30°	4161.4	4180.9	4161.4	4123.7	4074.9	3964.7	3907.5	3902.0	3885.2	3688.6	3390.2
32.5°	4411.0	4424.9	4411.0	4374.7	4318.9	4222.7	4140.4	4127.9	4105.6	3853.2	3507.3
35°	4632.7	4645.3	4642.5	4650.8	4604.8	4483.5	4433.3	4427.7	4369.1	4067.9	3666.3
37.5°	4875.4	4890.7	4869.8	4886.5	4868.4	4754.0	4738.7	4710.8	4627.1	4270.1	3833.6
40°	5151.5	5165.4	5132.0	5138.9	5118.0	5053.9	4975.8	4938.1	4814.0	4489.1	4097.2
42.5°	5447.1	5479.2	5494.5	5482.0	5433.2	5396.9	5260.3	5212.8	5109.6	4883.7	4530.9
45°	5875.3	5922.7	5945.0	5912.9	5892.0	5840.4	5673.0	5615.9	5561.5	5440.2	5136.1
47.5°	6336.9	6380.1	6451.2	6465.2	6481.9	6442.8	6207.2	6151.4	6161.1	6147.2	5880.8
50°	6705.0	6741.3	6901.7	7073.2	7215.4	7226.6	6925.4	6865.4	6918.4	6963.0	6777.5
52.5°	6972.8	7004.8	7216.8	7571.0	7893.2	8131.6	7806.7	7738.4	7781.6	7882.0	7797.0
55°	7190.3	7234.9	7456.7	8000.6	8651.8	9028.3	8820.6	8734.1	8716.0	8840.1	8888.9
57.5°	7304.7	7318.6	7629.6	8336.6	9208.2	9908.3	9999.0	9901.3	9728.4	9796.7	10050.6
60°	7043.9	7067.6	7492.9	8423.1	9647.5	10781.3	11235.9	11155.0	10786.9	10824.5	11104.8
62.5°	6322.9	6356.4	6868.2	8011.7	9683.8	11364.2	12378.1	12326.5	11832.8	11629.2	11712.9
65°	5072.0	5083.2	5613.1	6993.7	8962.8	11436.7	13174.4	13161.8	12563.5	12086.6	11728.2
67.5°	2892.3	2872.8	3581.2	4988.3	7396.7	10494.0	13226.0	13299.9	12800.6	12011.3	10752.0
70°	1253.7	1256.5	1582.8	2461.4	4787.5	8481.7	12284.6	12411.5	12114.5	10757.6	8554.2
72.5°	580.1	588.5	729.4	1065.4	2044.4	5261.7	10017.1	10131.4	9876.2	8610.0	6223.9
75°	410.0	417.0	486.7	610.8	939.9	2050.0	6700.8	6940.7	7064.8	6440.1	4101.4
77.5°	311.0	320.7	355.6	423.9	580.1	726.6	3206.1	3777.8	4500.2	4006.6	2112.8
80°	198.0	198.0	235.7	283.1	354.2	377.9	926.0	1097.5	2202.0	1651.2	829.8
82.5°	133.9	138.1	160.4	179.9	203.6	214.8	397.4	423.9	635.9	562.0	341.7
85°	71.1	73.9	83.7	82.3	97.6	85.1	167.3	166.0	232.9	255.2	129.7
87.5°	0.0	0.0	1.4	1.4	2.8	4.2	18.1	19.5	48.8	78.1	43.2
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: P638004
CATALOG NUMBER: GWS-SA4D-830-U-T3-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6	2345.6
2.5°	2356.8	2340.1	2348.4	2345.6	2354.0	2354.0	2338.7	2334.5	2335.9	2319.1	2313.6
5°	2377.7	2358.2	2362.4	2356.8	2365.2	2372.1	2365.2	2365.2	2373.5	2361.0	2354.0
7.5°	2425.1	2402.8	2402.8	2395.8	2405.6	2411.2	2405.6	2414.0	2429.3	2416.8	2409.8
10°	2500.4	2473.9	2475.3	2467.0	2471.2	2468.4	2446.0	2439.1	2443.3	2432.1	2426.5
12.5°	2598.1	2561.8	2561.8	2545.1	2535.3	2506.0	2460.0	2443.3	2446.0	2436.3	2432.1
15°	2691.5	2658.0	2651.0	2617.6	2573.0	2518.6	2476.7	2465.6	2468.4	2458.6	2451.6
17.5°	2801.7	2758.4	2733.3	2672.0	2589.7	2533.9	2492.1	2465.6	2443.3	2420.9	2415.4
20°	2903.5	2849.1	2803.1	2708.2	2607.8	2531.1	2453.0	2387.5	2333.1	2303.8	2296.8
22.5°	3008.1	2938.3	2857.4	2733.3	2606.4	2480.9	2337.3	2238.3	2157.4	2114.1	2122.5
25°	3107.1	3019.2	2909.0	2757.0	2561.8	2369.3	2174.1	2026.3	1934.2	1900.8	1891.0
27.5°	3189.3	3080.6	2956.5	2745.9	2469.8	2209.0	1951.0	1786.4	1697.2	1659.5	1649.8
30°	3281.4	3158.7	3024.8	2694.3	2324.7	1984.5	1698.6	1564.7	1500.5	1464.3	1465.7
32.5°	3387.4	3259.1	3121.0	2595.3	2139.2	1741.8	1490.8	1398.7	1347.1	1310.9	1305.3
35°	3529.6	3402.7	3185.2	2446.0	1903.6	1518.7	1348.5	1273.2	1209.1	1161.7	1151.9
37.5°	3705.3	3618.9	3192.1	2246.6	1651.2	1365.3	1246.7	1165.8	1087.8	1025.0	1018.0
40°	4006.6	3907.5	3135.0	1997.0	1436.4	1266.3	1161.7	1068.2	977.6	907.9	898.1
42.5°	4436.1	4232.5	3012.2	1715.3	1274.6	1188.2	1080.8	962.2	870.2	821.4	814.4
45°	4982.7	4595.1	2828.2	1450.3	1154.7	1111.5	995.7	871.6	822.8	787.9	781.0
47.5°	5652.1	5017.6	2616.2	1243.9	1061.3	1041.7	909.2	840.9	797.7	768.4	761.4
50°	6452.6	5555.9	2441.9	1082.2	977.6	960.8	881.4	822.8	787.9	764.2	758.6
52.5°	7366.0	6154.2	2356.8	966.4	905.1	888.3	871.6	818.6	789.3	771.2	764.2
55°	8314.3	6784.5	2277.3	877.2	843.7	853.5	873.0	832.5	810.2	786.5	779.6
57.5°	9230.6	7375.8	2082.1	807.4	799.1	836.7	880.0	846.5	820.0	796.3	787.9
60°	9862.3	7699.3	1751.6	751.7	765.6	815.8	861.8	825.6	792.1	782.3	778.2
62.5°	10032.4	7660.3	1359.7	694.5	725.2	769.8	814.4	790.7	755.8	771.2	772.6
65°	9635.0	7241.9	1020.8	638.7	672.2	709.8	765.6	755.8	743.3	785.1	786.5
67.5°	*8509.6*	*6214.1*	*778.2*	*589.9*	*617.8*	*663.8*	*750.3*	*790.7*	*793.5*	*846.5*	*840.9*
70°	6438.7	4642.5	609.4	543.9	576.0	663.8	799.1	817.2	783.7	832.5	821.4
72.5°	4451.4	3063.8	518.8	503.4	524.4	633.1	797.7	797.7	761.4	761.4	740.5
75°	2765.4	1801.8	451.8	451.8	451.8	553.6	775.4	734.9	670.8	641.5	624.8
77.5°	1365.3	875.8	379.3	393.3	377.9	463.0	633.1	601.1	562.0	531.3	520.2
80°	582.9	437.9	306.8	322.1	304.0	348.6	502.0	495.1	457.4	417.0	404.4
82.5°	267.8	225.9	245.4	252.4	221.7	262.2	366.8	366.8	345.8	290.1	269.1
85°	114.4	119.9	170.1	170.1	139.5	147.8	196.6	186.9	167.3	136.7	125.5
87.5°	39.0	58.6	86.5	75.3	29.3	12.6	7.0	2.8	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

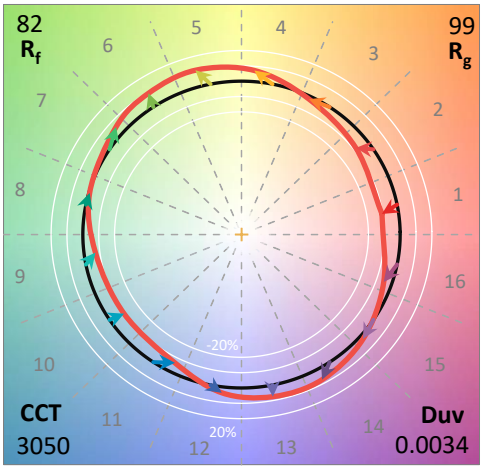
Test Information

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

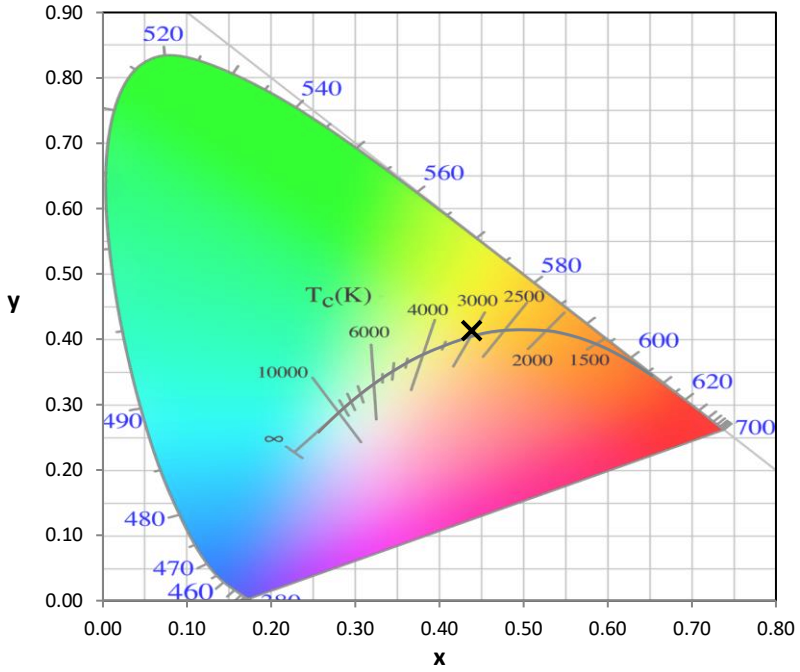
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

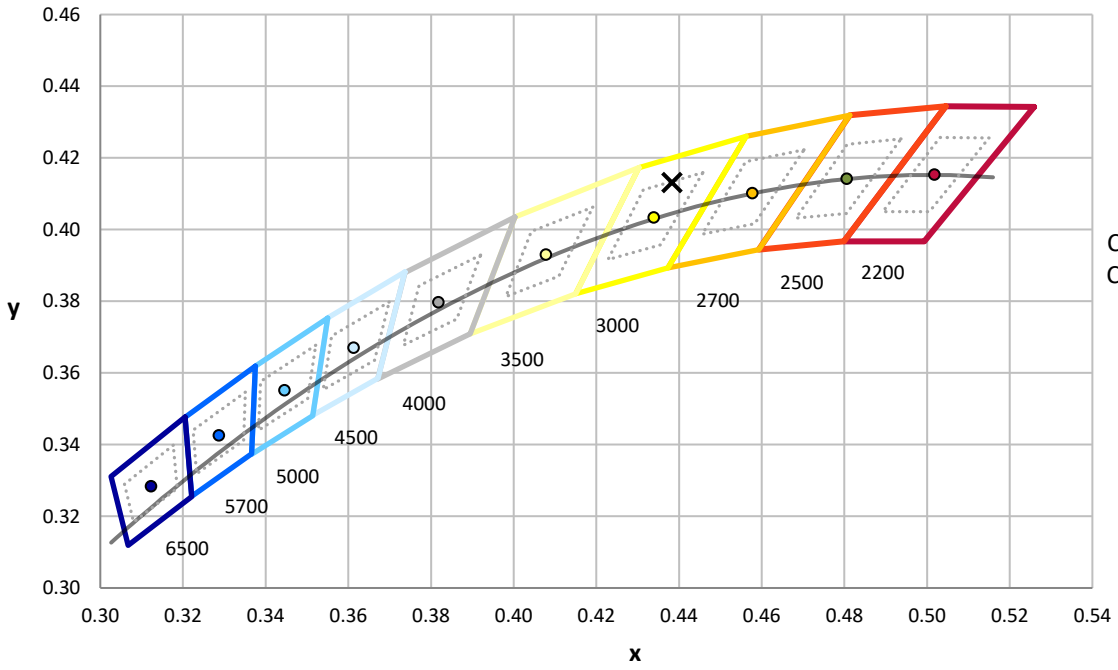
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

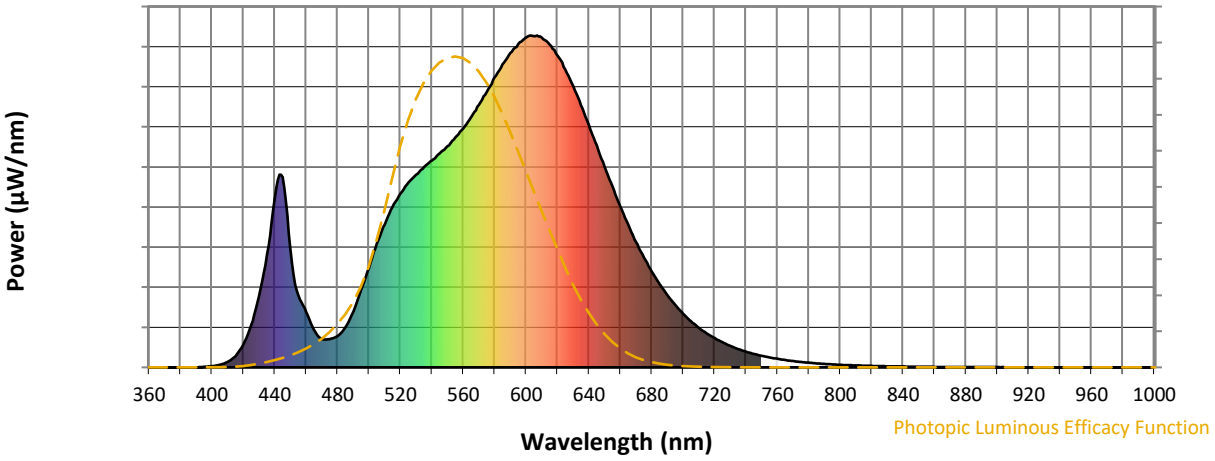


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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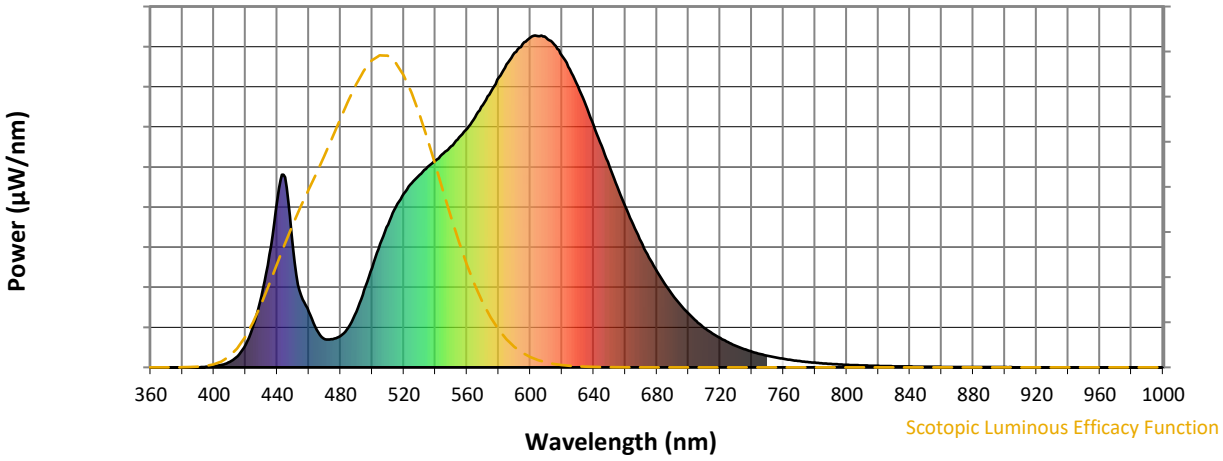
Scotopic Flux vs. Wavelength



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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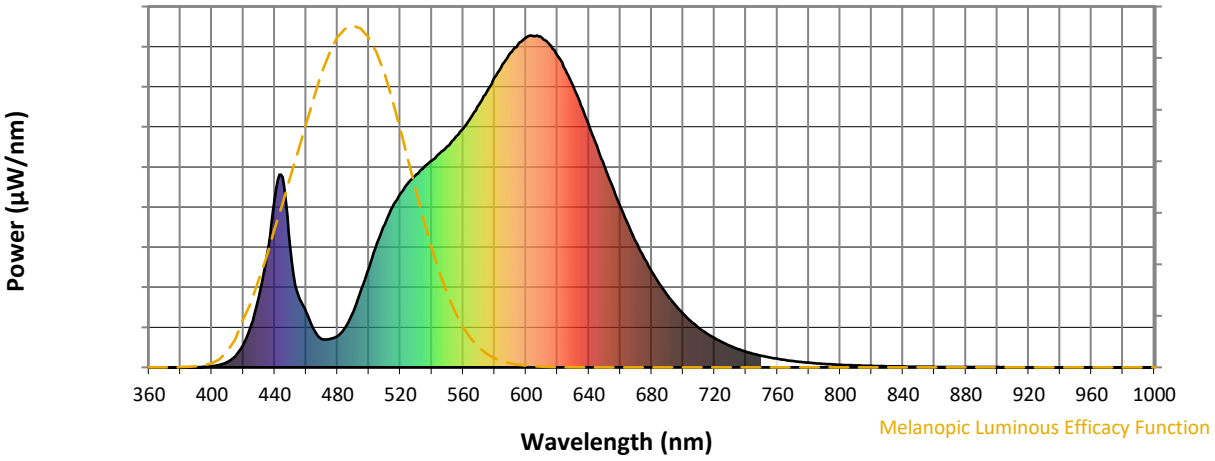
Melanopic Flux vs. Wavelength



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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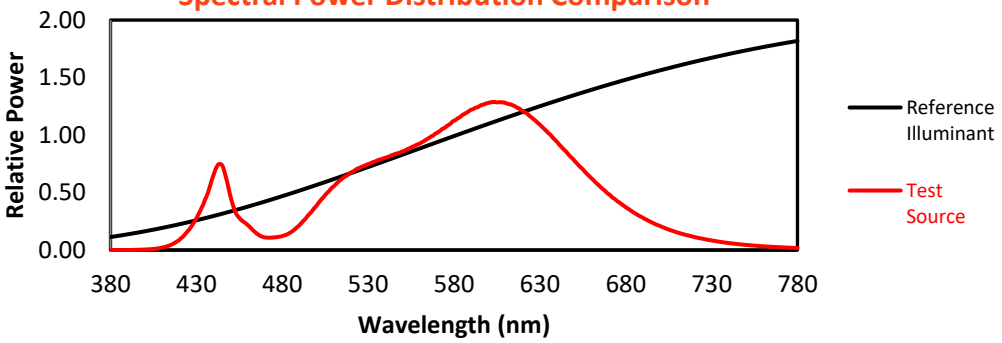
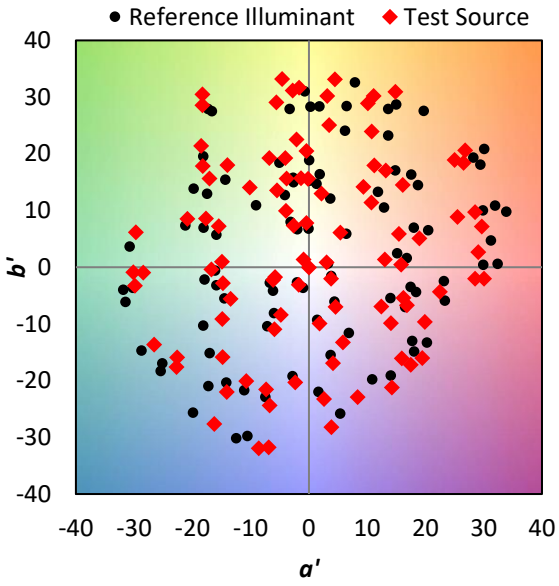
Summary

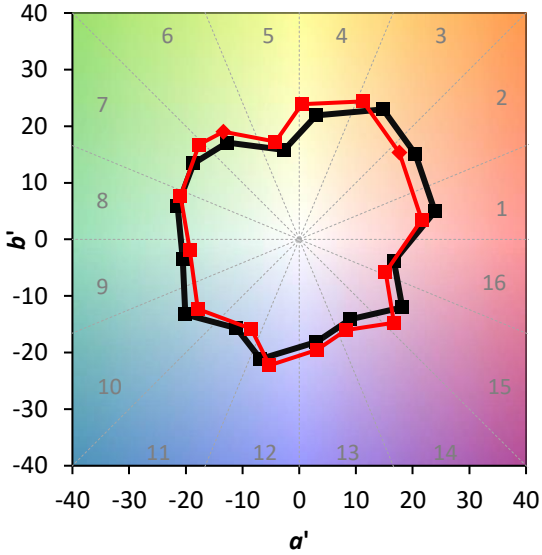
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

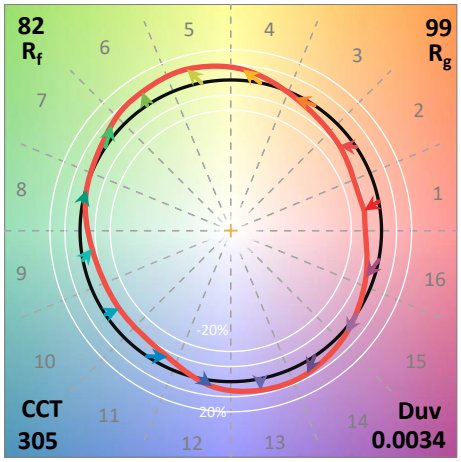
Spectral Power Distribution Comparison

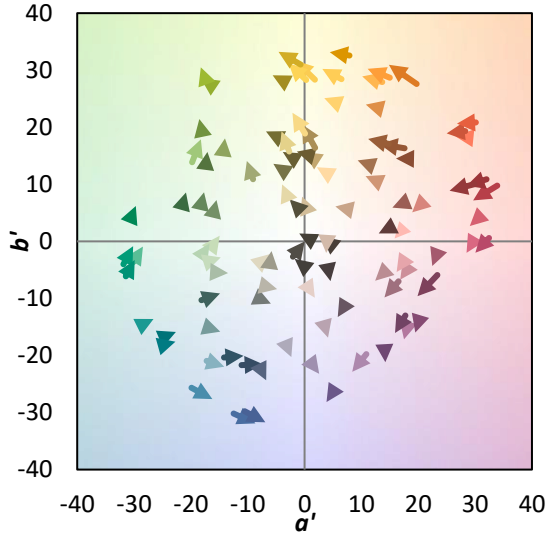


Color Vector Graphics









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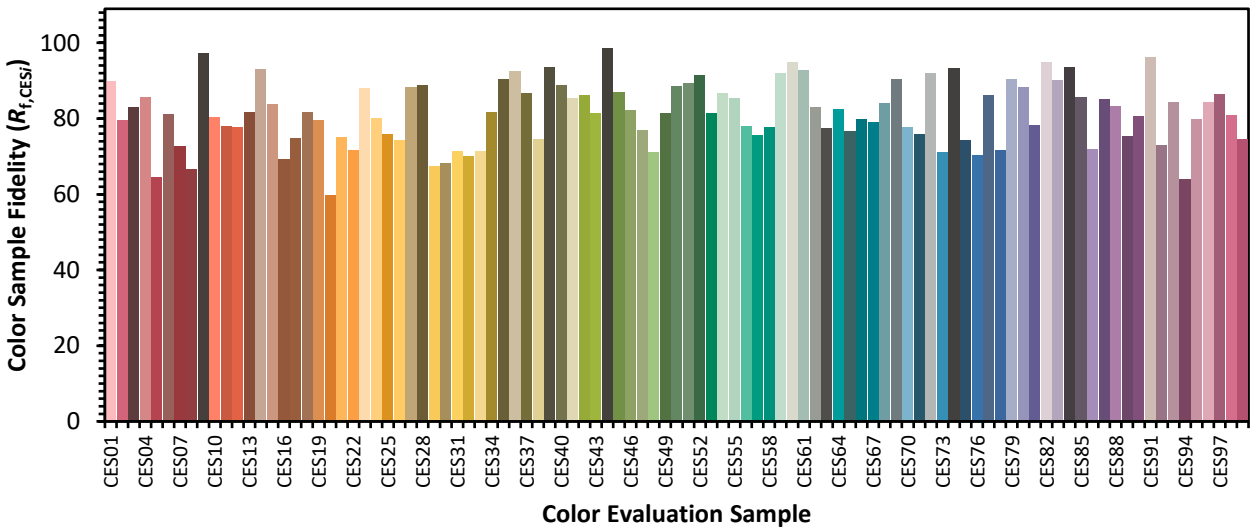
Individual Sample Fidelity Index ($R_{f,i}$)

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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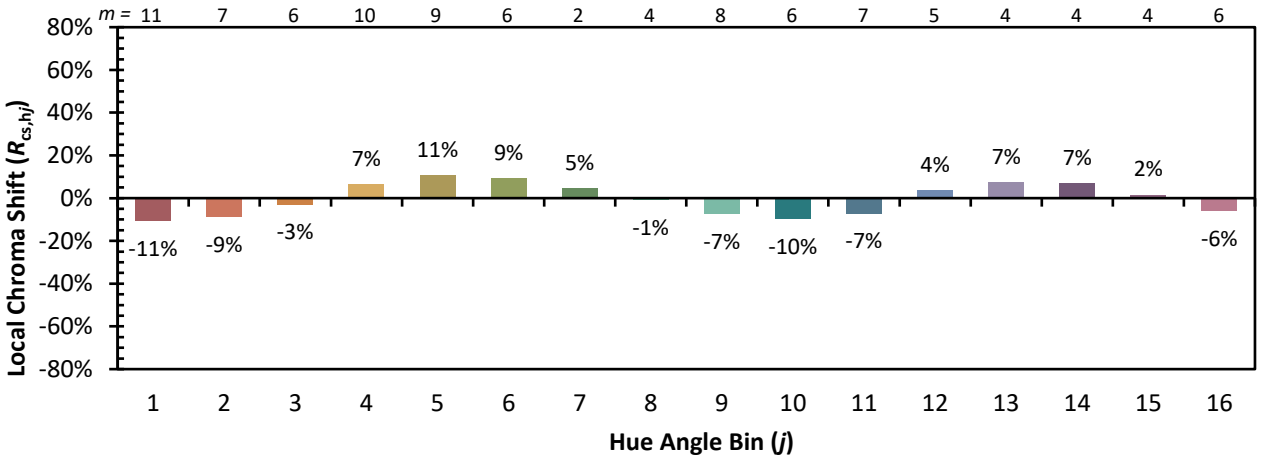
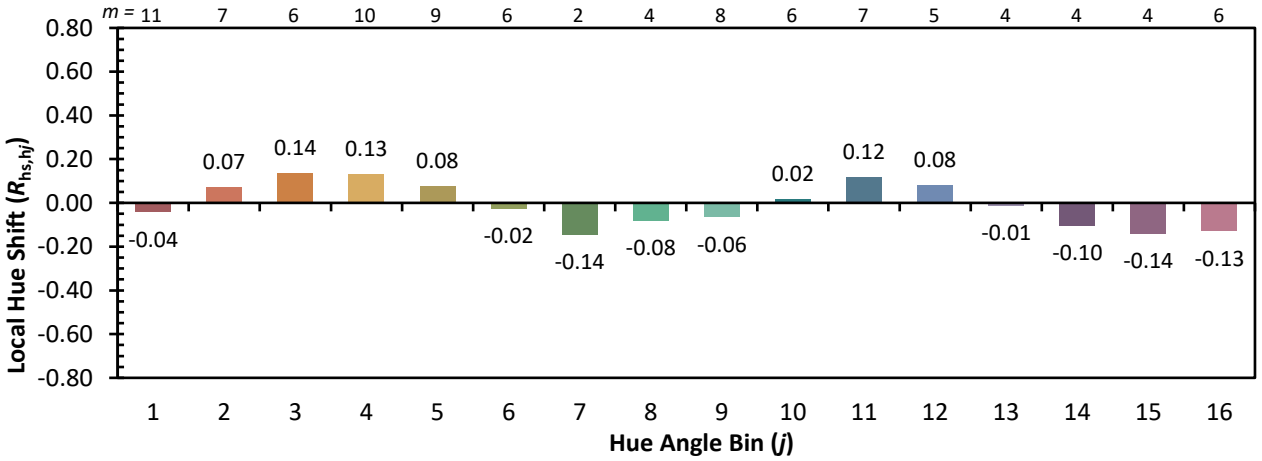
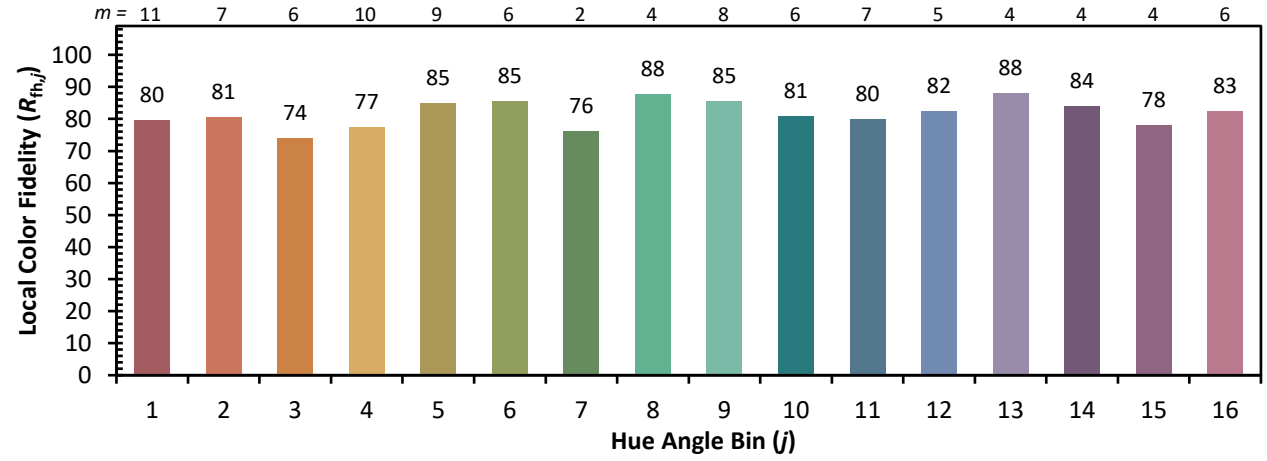
Color Rendition by Hue-Angle Bin







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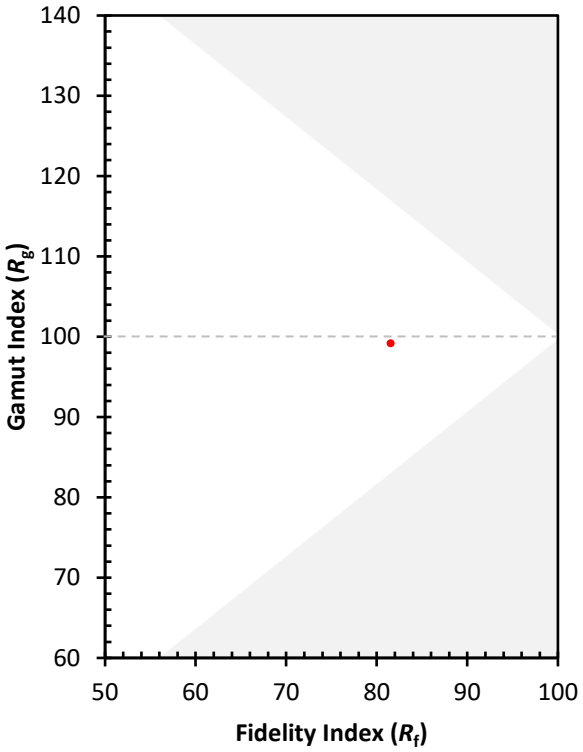
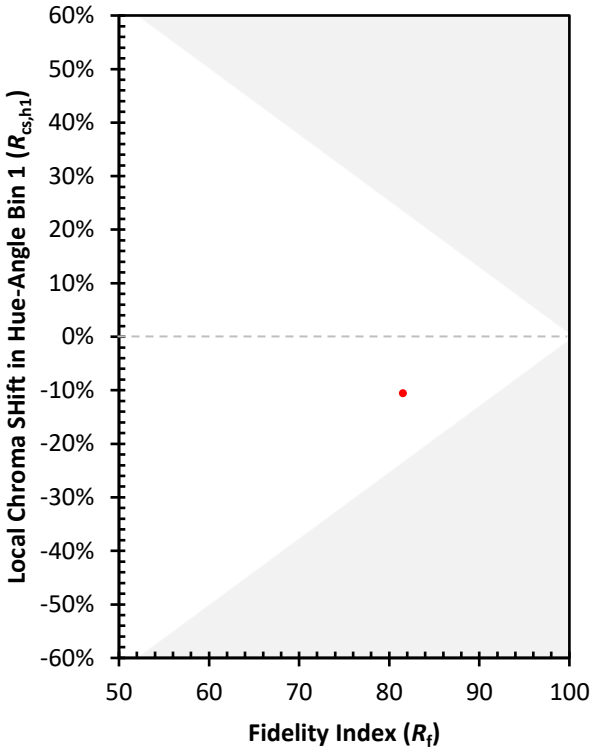
Measure Comparisons





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