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: P640485

Luminaire Tested: GWS-SA5D-830-U-T4FT-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:	P640485
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-54)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5D-830-U-T4FT-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	23050.7 lumens
Efficiency:	N/A
Efficacy:	112.7 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B3 - U0 - G4

Input Watts (W):	204.6
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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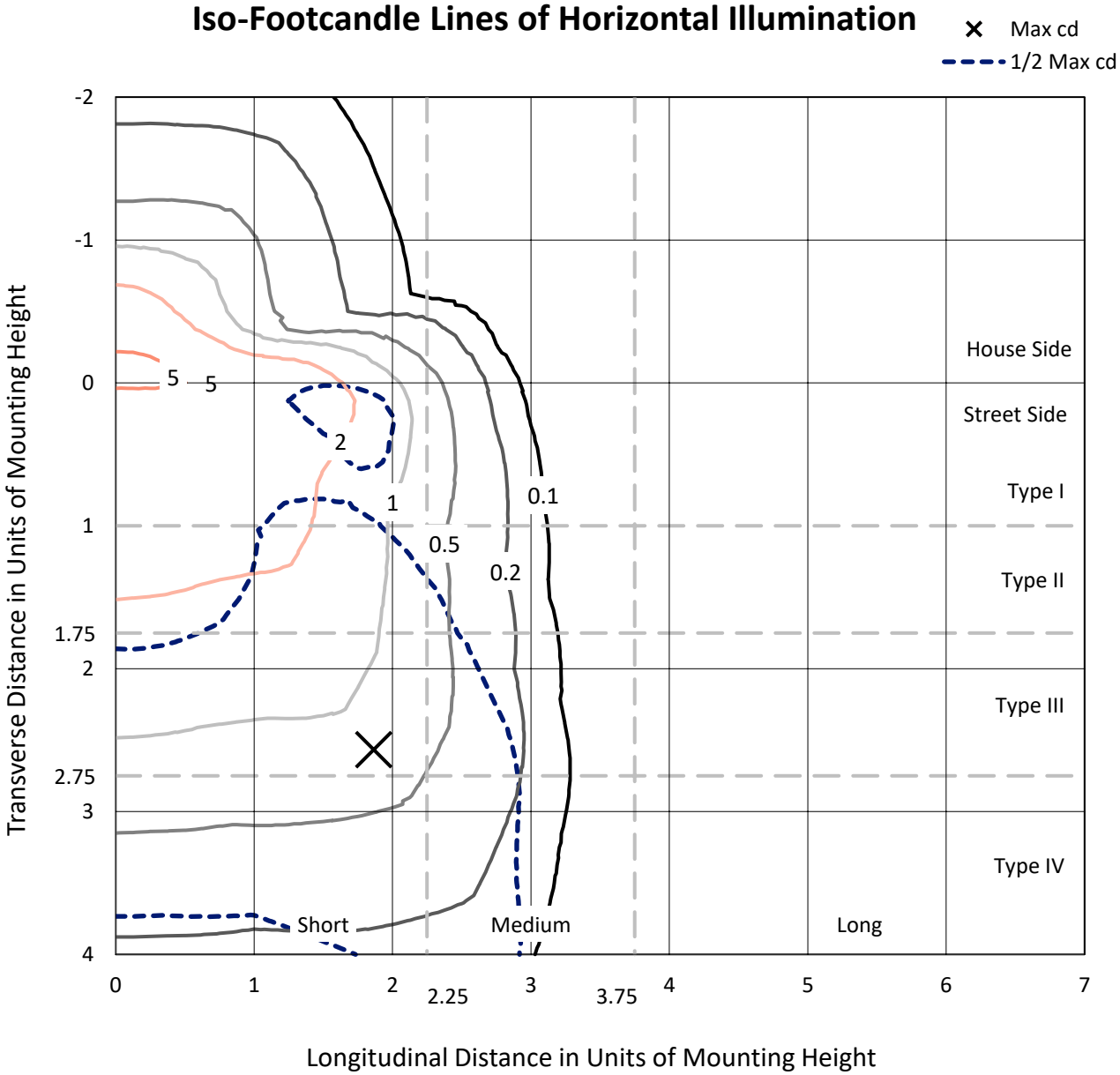
Scaled Data Report

REPORT NUMBER: P640485
CATALOG NUMBER: GWS-SA5D-830-U-T4FT-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
Type IV - Short - N/A

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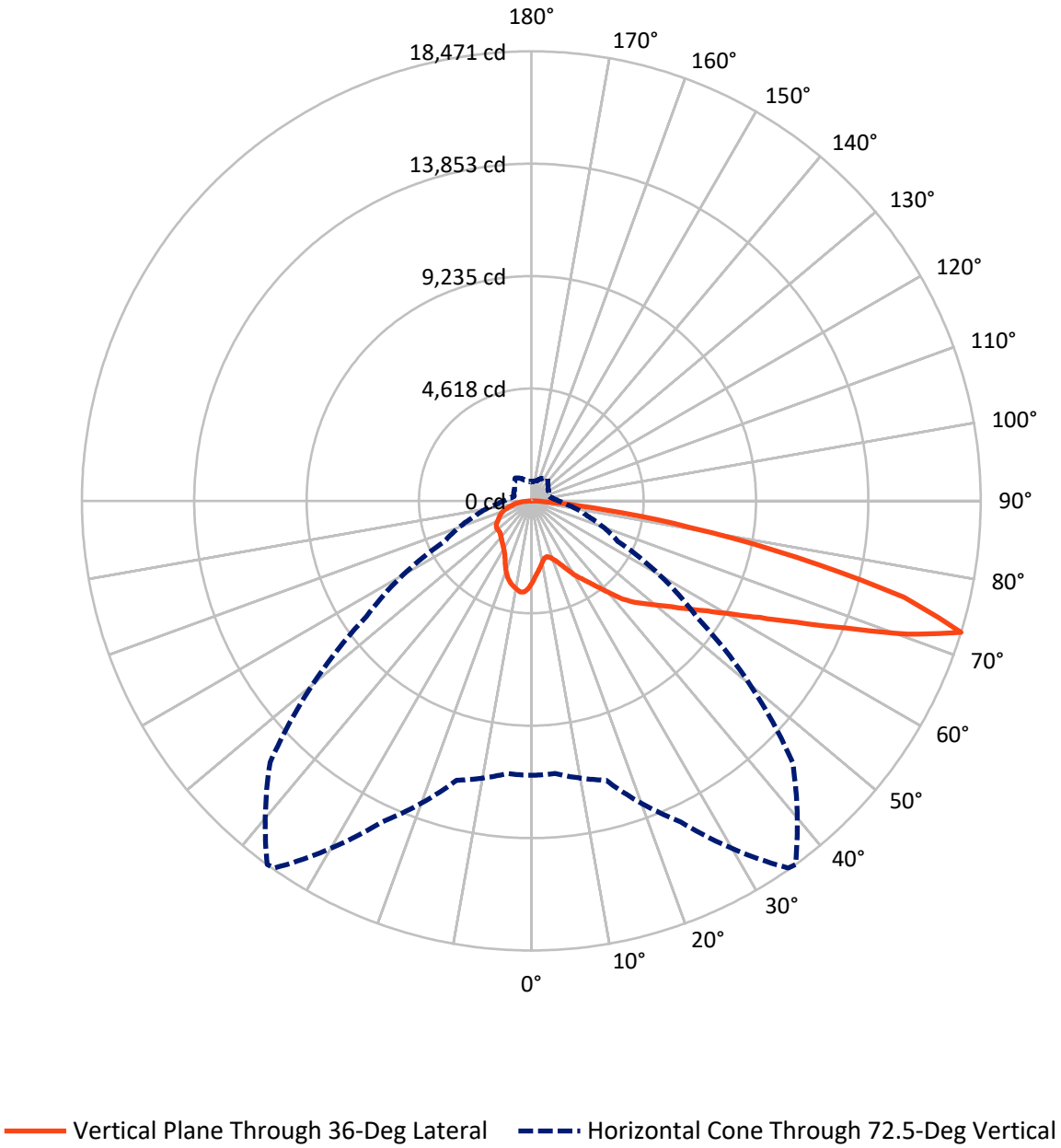
Luminous Intensity Polar Plot



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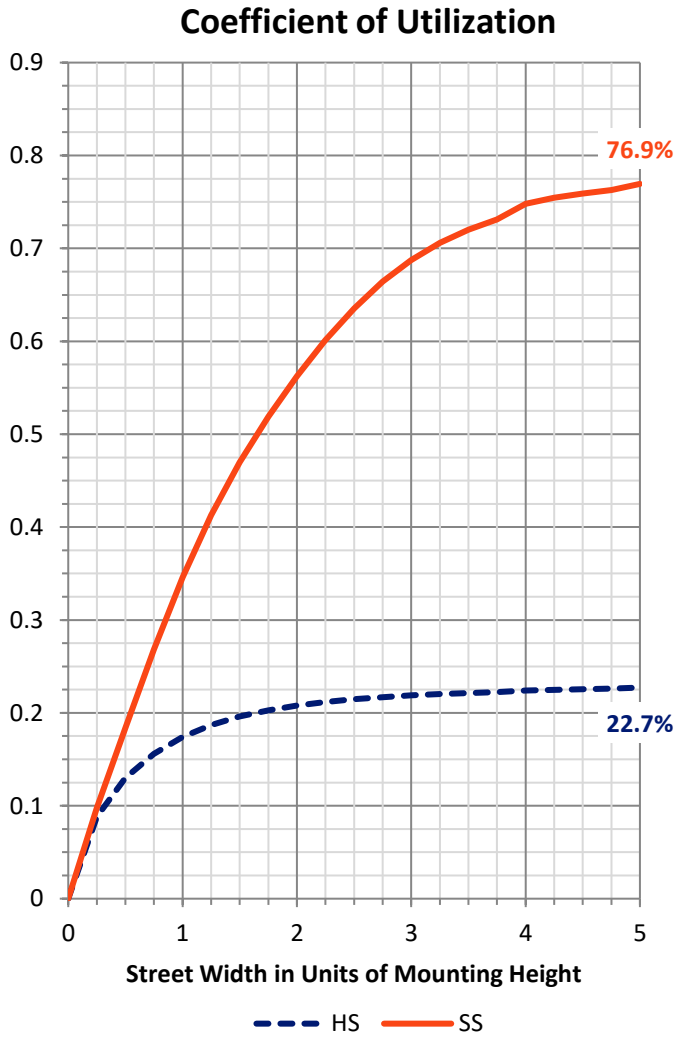
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5314.2	0.0	5314.2
	% Fixture	23.1	0.0	23.1
Street Side	Lumens	17736.5	0.0	17736.5
	% Fixture	76.9	0.0	76.9
Total	Lumens	23050.7	0.0	23050.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.3	1.4
10°-20°	889.7	3.9
20°-30°	1473.4	6.4
30°-40°	2206.6	9.6
40°-50°	3219.2	14.0
50°-60°	4582.0	19.9
60°-70°	5789.0	25.1
70°-80°	4125.1	17.9
80°-90°	450.3	2.0
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°	23050.7	100.0
0°-180°	23050.7	100.0



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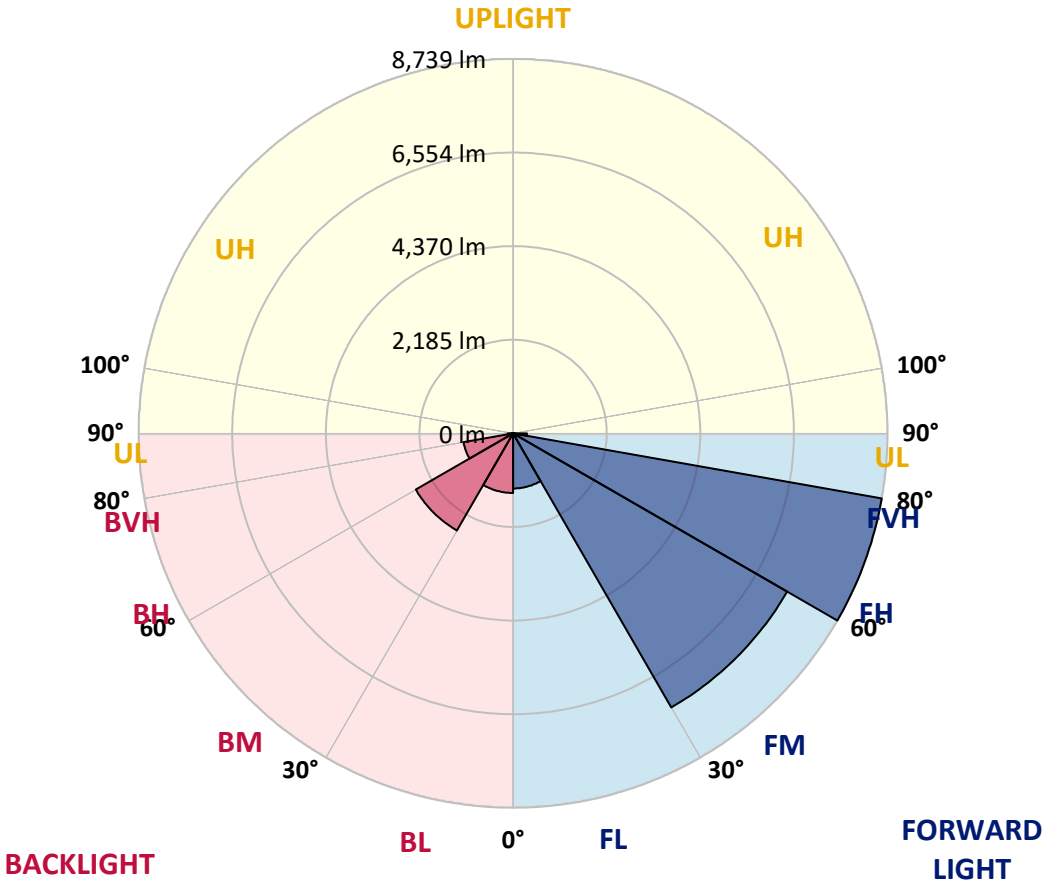
REPORT NUMBER: P640485
CATALOG NUMBER: GWS-SA5D-830-U-T4FT-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1286.9	5.6			
FM	(30°-60°)	7387.2	32.0			
FH	(60°-80°)	8739.3	37.9			G4/12000
FVH	(80°-90°)	323.2	1.4			G3/500
BL	(0°-30°)	1391.6	6.0	B3/2500		
BM	(30°-60°)	2620.6	11.4	B3/5000		
BH	(60°-80°)	1174.8	5.1	B3/2500		G3/2500
BVH	(80°-90°)	127.1	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
Type IV Short



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REPORT NUMBER: P640485
CATALOG NUMBER: GWS-SA5D-830-U-T4FT-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6
2.5°	3077.6	3072.5	3062.2	3093.0	3123.8	3120.4	3163.2	3204.2	3248.7	3294.9	3356.5
5°	2831.3	2827.8	2819.3	2865.5	2911.7	2910.0	2980.1	3046.8	3137.5	3236.7	3359.9
7.5°	2584.9	2576.4	2588.3	2646.5	2711.5	2718.4	2814.2	2923.6	3055.4	3204.2	3378.7
10°	2367.7	2365.9	2371.1	2436.1	2533.6	2540.4	2663.6	2815.9	2990.4	3188.8	3421.5
12.5°	2311.2	2307.8	2294.1	2326.6	2400.2	2410.4	2545.6	2732.0	2945.9	3197.4	3479.6
15°	2403.6	2395.0	2347.1	2331.7	2367.7	2376.2	2490.8	2682.4	2920.2	3212.8	3553.2
17.5°	2562.7	2557.6	2466.9	2403.6	2427.5	2434.4	2519.9	2673.9	2913.4	3243.6	3643.9
20°	2795.3	2773.1	2631.1	2535.3	2535.3	2545.6	2596.9	2711.5	2921.9	3281.2	3746.5
22.5°	3103.3	3058.8	2858.6	2728.6	2694.4	2708.1	2730.3	2805.6	2957.9	3344.5	3874.8
25°	3448.8	3407.8	3170.0	2986.9	2939.0	2944.2	2925.4	2939.0	3036.6	3431.7	4033.9
27.5°	3816.7	3789.3	3536.1	3303.4	3228.2	3228.2	3161.4	3128.9	3146.0	3531.0	4211.8
30°	4145.1	4107.5	3893.6	3638.7	3539.5	3539.5	3412.9	3342.8	3301.7	3652.4	4449.6
32.5°	4317.9	4295.7	4153.7	3958.6	3837.2	3818.4	3708.9	3626.8	3531.0	3832.1	4771.2
35°	4543.7	4538.6	4453.0	4300.8	4146.8	4119.5	4044.2	3979.2	3813.2	4056.2	5198.9
37.5°	4827.7	4819.1	4805.5	4714.8	4530.0	4524.9	4458.2	4379.5	4163.9	4379.5	5717.3
40°	5145.9	5130.5	5113.4	5111.7	5000.5	4981.7	4976.5	4887.6	4586.5	4769.5	6257.9
42.5°	5583.8	5530.8	5370.0	5441.9	5524.0	5506.9	5571.9	5438.4	5113.4	5233.1	6769.4
45°	6122.7	5992.7	5674.5	5695.0	5902.0	5936.3	6162.1	6129.6	5693.3	5768.6	7308.3
47.5°	6446.1	6333.1	6037.2	6020.1	6278.4	6321.2	6812.2	6873.7	6317.8	6413.6	7973.7
50°	6711.2	6632.5	6389.6	6413.6	6687.3	6730.0	7457.1	7588.8	6906.2	7073.9	8747.0
52.5°	7031.1	6918.2	6730.0	6842.9	7178.3	7229.6	8173.9	8315.9	7436.6	7799.2	9547.6
55°	7210.8	7164.6	7168.0	7340.8	7761.6	7831.8	8924.9	8901.0	7922.4	8420.2	10149.8
57.5°	7624.8	7607.6	7765.0	7830.0	8442.5	8533.2	9675.9	9470.6	8363.8	8901.0	10438.9
60°	8355.2	8312.5	8449.3	8548.6	9284.2	9412.5	10514.2	10028.3	8663.2	9258.5	10341.4
62.5°	9381.7	9328.6	9333.8	9491.2	10411.5	10546.7	11446.5	10493.7	8755.6	9313.3	9723.8
65°	10657.9	10580.9	10493.7	10707.5	11908.4	12021.3	12461.0	10832.4	8534.9	8786.3	8433.9
67.5°	12004.2	11940.9	11838.3	12286.5	13846.7	13915.1	13598.6	10803.3	7835.2	7376.7	5915.7
70°	12082.9	12098.3	12584.2	14206.0	16376.9	16394.0	14674.7	10218.2	6345.1	4781.5	2947.6
72.5°	11272.0	11246.4	11879.4	14556.7	18412.7	18470.8	15182.8	8278.3	3921.0	2384.8	1382.3
75°	9155.9	9200.3	9865.8	12736.4	15781.5	15832.9	12377.2	4880.7	1863.0	1166.7	884.5
77.5°	3941.5	4189.6	5501.7	8972.8	11302.8	11143.7	6379.3	1977.6	993.9	831.4	677.5
80°	1137.6	1235.2	1960.5	4266.6	6772.8	6653.1	2525.0	740.7	692.8	624.4	485.8
82.5°	367.8	407.2	718.5	1698.8	3034.8	3031.4	958.0	437.9	453.3	424.3	313.1
85°	102.6	118.0	220.7	514.9	939.2	920.4	277.1	207.0	241.2	244.6	155.7
87.5°	0.0	0.0	1.7	3.4	3.4	3.4	6.8	30.8	70.1	89.0	63.3
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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CATALOG NUMBER: GWS-SA5D-830-U-T4FT-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6	3373.6
2.5°	3394.1	3389.0	3459.1	3513.9	3565.2	3599.4	3609.7	3616.5	3630.2	3637.0	3630.2
5°	3418.1	3443.7	3560.0	3645.6	3714.0	3755.1	3756.8	3753.4	3763.6	3755.1	3749.9
7.5°	3469.4	3519.0	3666.1	3756.8	3801.3	3803.0	3761.9	3714.0	3690.1	3669.5	3662.7
10°	3537.8	3611.4	3772.2	3832.1	3818.4	3755.1	3664.4	3589.1	3546.4	3515.6	3508.7
12.5°	3631.9	3714.0	3866.3	3864.6	3779.0	3666.1	3560.0	3469.4	3407.8	3371.9	3359.9
15°	3720.9	3825.2	3934.7	3854.3	3719.1	3582.3	3445.4	3324.0	3241.8	3185.4	3175.1
17.5°	3830.3	3941.5	3984.3	3821.8	3643.9	3467.7	3284.6	3125.5	3014.3	2947.6	2942.5
20°	3956.9	4056.2	4008.3	3765.3	3546.4	3315.4	3067.4	2889.4	2769.7	2704.7	2709.8
22.5°	4104.1	4175.9	4015.1	3688.3	3411.2	3099.9	2822.7	2651.6	2571.2	2537.0	2538.7
25°	4261.4	4307.6	4003.1	3584.0	3204.2	2836.4	2571.2	2492.5	2485.7	2477.1	2480.6
27.5°	4447.9	4437.7	3967.2	3436.9	2925.4	2530.2	2395.0	2415.6	2442.9	2439.5	2442.9
30°	4697.7	4600.2	3921.0	3233.3	2593.5	2273.6	2290.7	2348.8	2384.8	2388.2	2398.5
32.5°	4983.4	4779.8	3847.4	2956.2	2277.0	2129.9	2193.2	2263.3	2306.1	2314.6	2328.3
35°	5323.8	4985.1	3717.4	2610.6	2049.5	2044.3	2102.5	2150.4	2196.6	2200.0	2200.0
37.5°	5715.6	5190.4	3510.4	2229.1	1909.2	1970.8	2025.5	2035.8	2047.8	2037.5	2042.6
40°	6074.8	5388.8	3216.2	1881.8	1794.6	1905.8	1952.0	1917.7	1880.1	1854.4	1859.6
42.5°	6375.9	5524.0	2826.1	1638.9	1678.2	1847.6	1883.5	1813.4	1739.8	1691.9	1698.8
45°	6714.6	5648.9	2367.7	1474.7	1579.0	1806.5	1830.5	1739.8	1645.7	1573.9	1563.6
47.5°	7181.7	5903.8	1960.5	1360.0	1508.9	1784.3	1823.6	1700.5	1577.3	1469.5	1457.5
50°	7758.2	6264.7	1620.1	1284.8	1476.4	1772.3	1821.9	1657.7	1510.6	1384.0	1375.4
52.5°	8387.7	6617.1	1368.6	1226.6	1443.9	1736.4	1813.4	1609.8	1440.4	1303.6	1293.3
55°	8806.9	6755.7	1199.2	1171.9	1390.8	1679.9	1779.2	1563.6	1334.4	1209.5	1194.1
57.5°	8930.0	6577.8	1081.2	1122.2	1322.4	1601.2	1714.2	1466.1	1269.4	1170.1	1158.2
60°	8717.9	6129.6	1007.6	1081.2	1247.1	1500.3	1601.2	1409.6	1218.0	1129.1	1120.5
62.5°	8119.2	5438.4	951.2	1038.4	1170.1	1394.3	1529.4	1341.2	1161.6	1091.5	1079.5
65°	6914.8	4459.9	905.0	993.9	1096.6	1293.3	1450.7	1272.8	1100.0	1047.0	1033.3
67.5°	4836.3	3132.4	855.4	940.9	1023.0	1195.8	1368.6	1209.5	1036.7	997.4	983.7
70°	2364.2	1661.1	795.5	879.3	944.3	1096.6	1286.5	1132.5	952.9	930.6	911.8
72.5°	*1125.7*	*928.9*	*725.4*	*795.5*	*836.6*	*964.9*	*1149.6*	*1021.3*	*853.7*	*805.8*	*773.3*
75°	754.4	660.3	633.0	696.3	706.5	809.2	985.4	881.0	752.7	698.0	670.6
77.5°	571.4	504.7	532.0	588.5	568.0	665.5	810.9	785.2	679.2	629.6	615.9
80°	402.0	367.8	422.6	456.8	441.4	566.3	730.5	672.3	559.4	504.7	494.4
82.5°	253.2	246.3	311.4	316.5	321.6	448.2	600.5	528.6	434.5	357.5	331.9
85°	126.6	140.3	186.5	186.5	184.8	230.9	342.1	297.7	234.4	186.5	181.3
87.5°	42.8	59.9	80.4	65.0	49.6	39.3	44.5	54.7	58.2	56.5	56.5
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

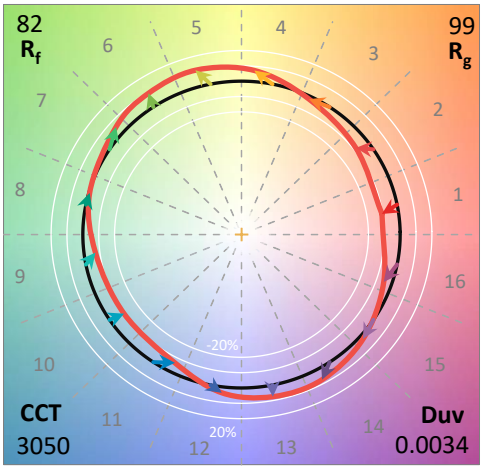
Test Information

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

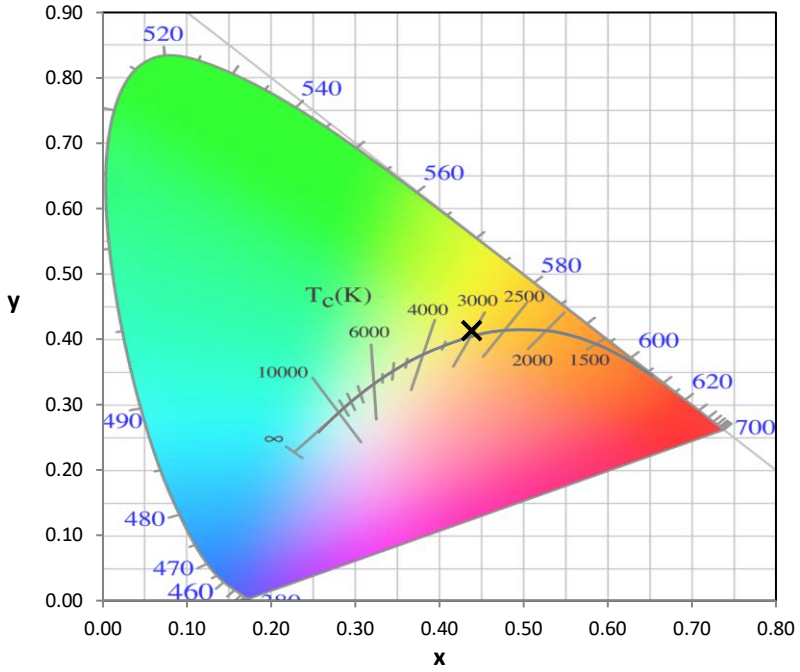
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

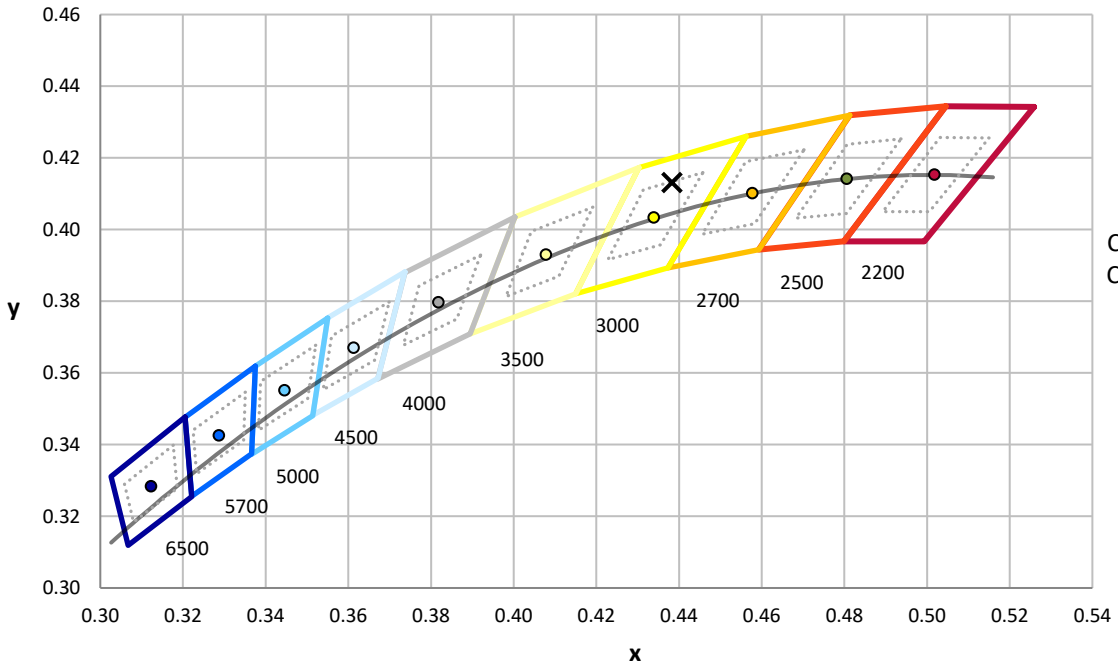
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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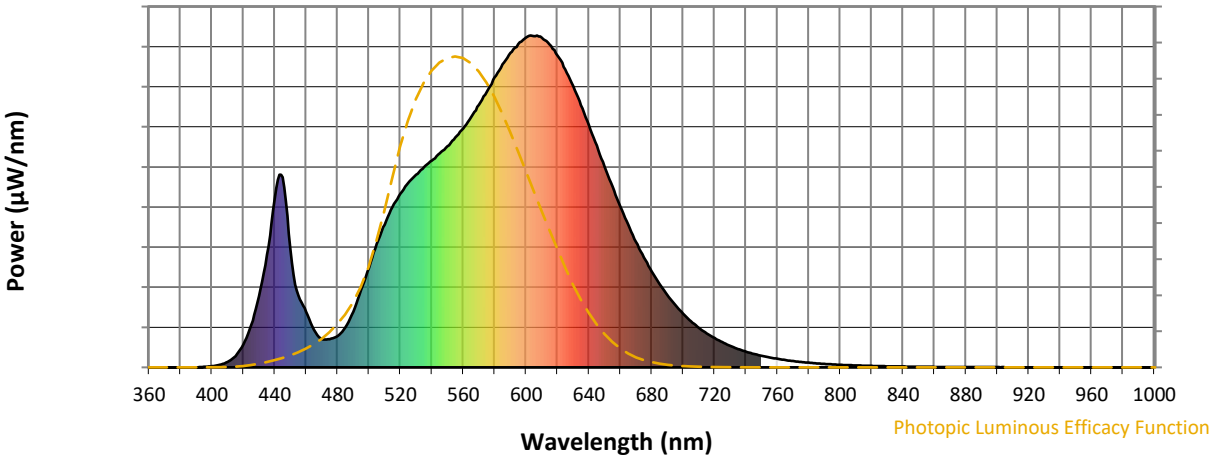
Photopic Flux vs. Wavelength



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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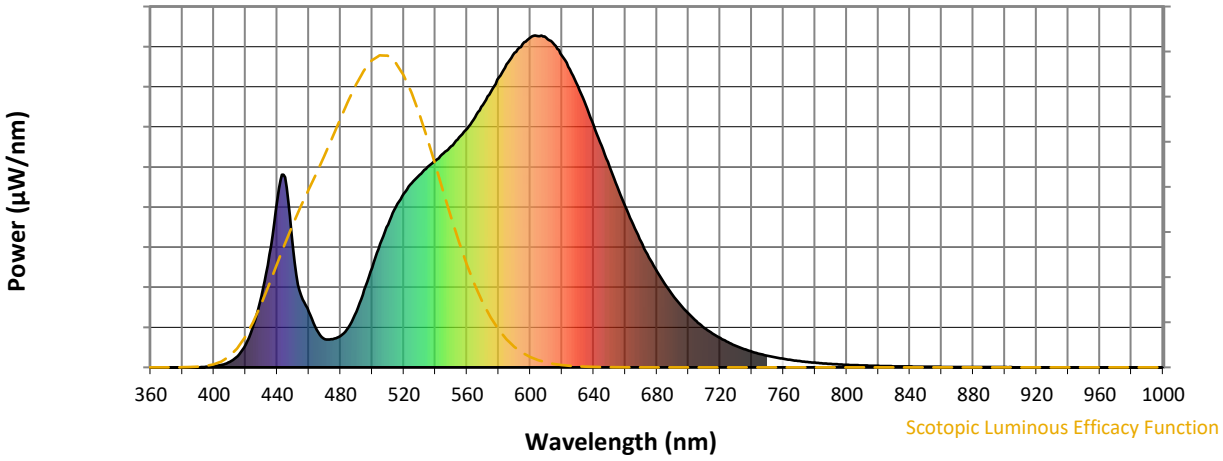
Scotopic Flux vs. Wavelength



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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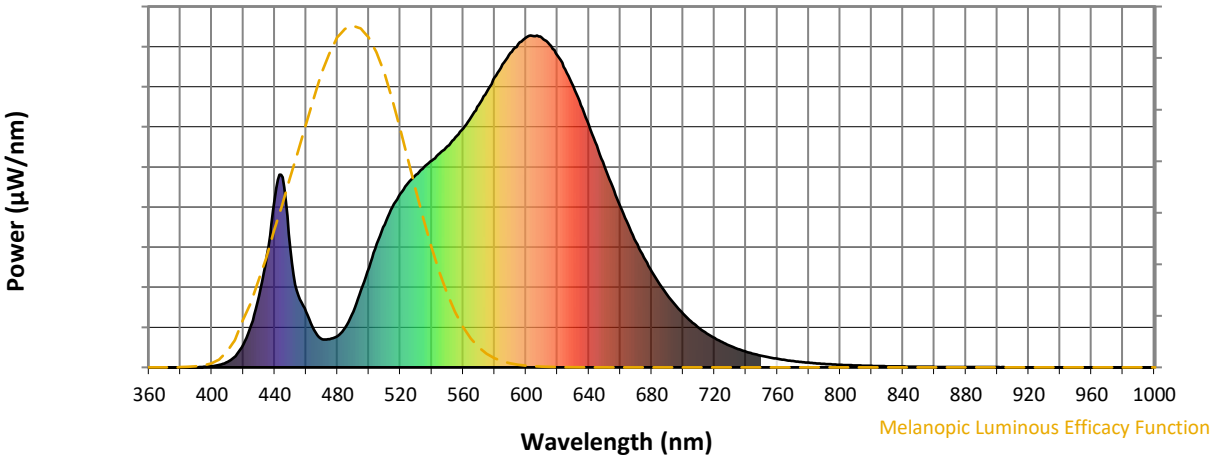
Melanopic Flux vs. Wavelength



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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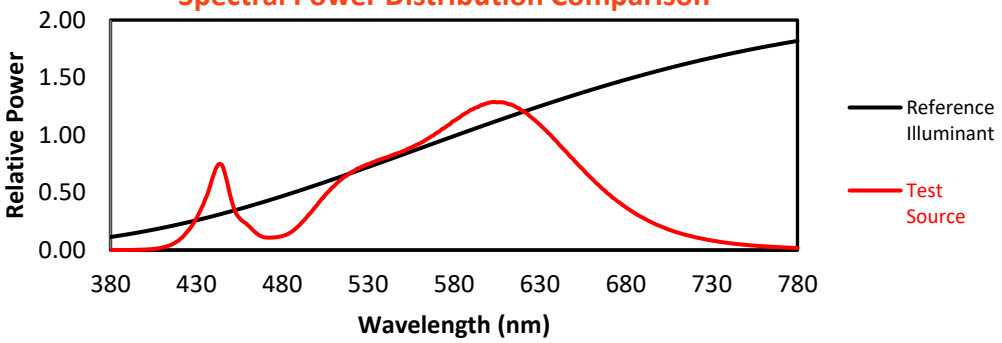
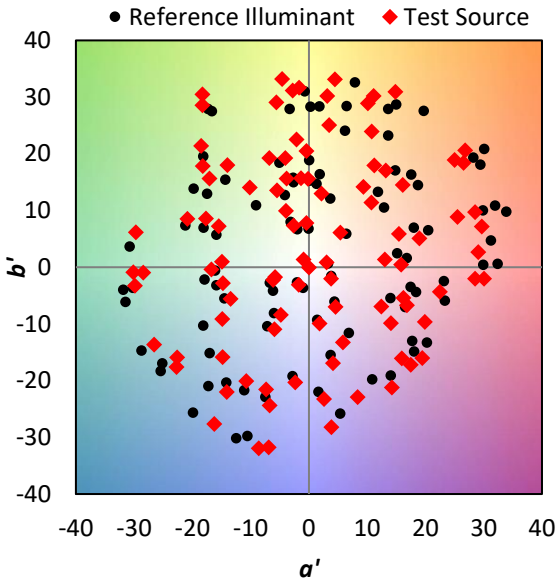
Summary

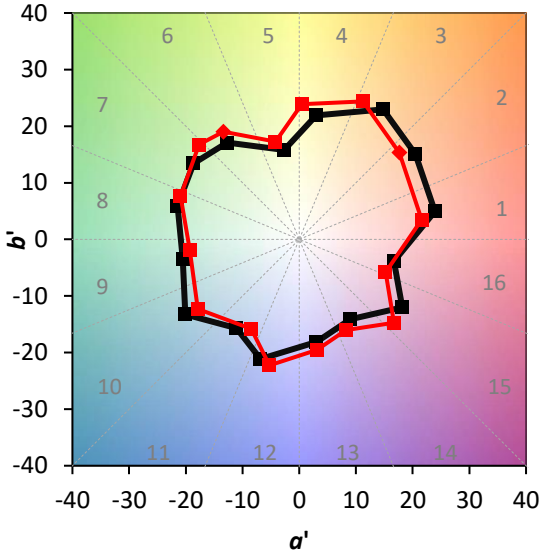
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

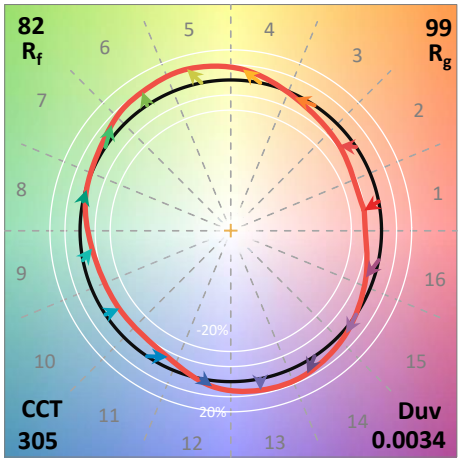
Spectral Power Distribution Comparison

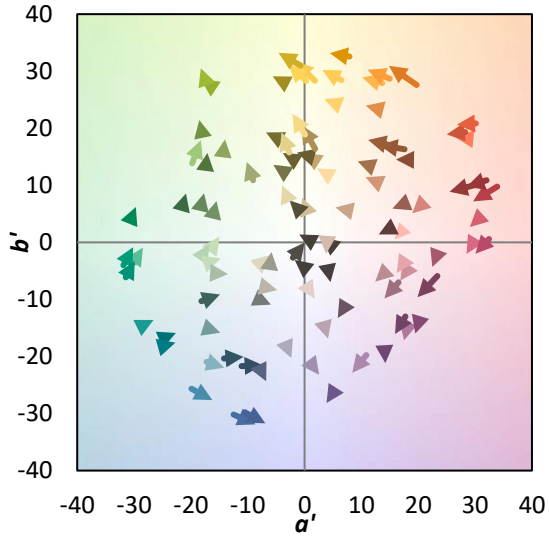


Color Vector Graphics









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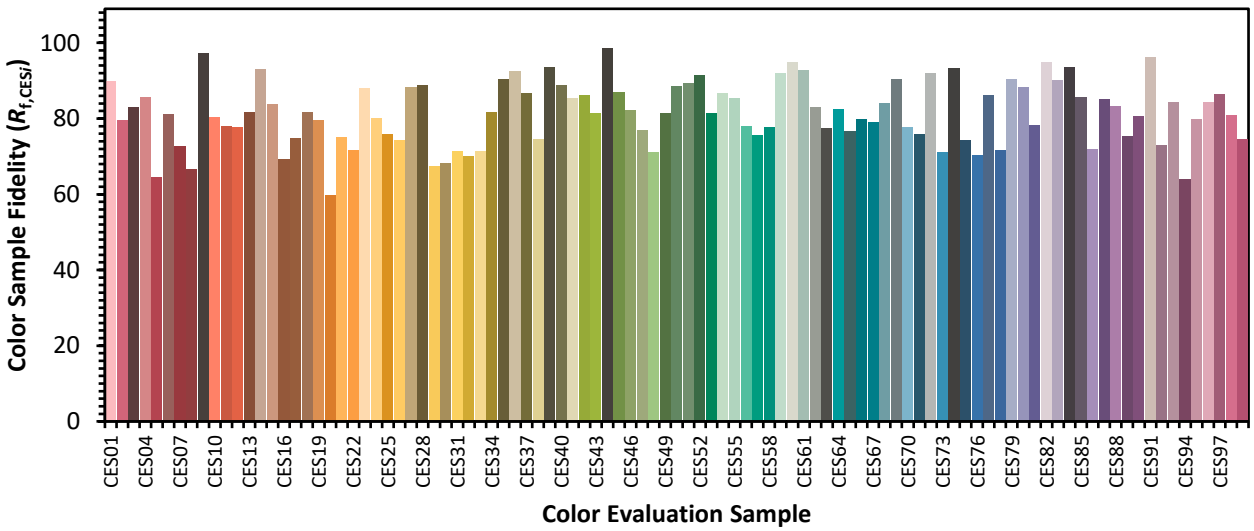
Individual Sample Fidelity Index ($R_{f,i}$)

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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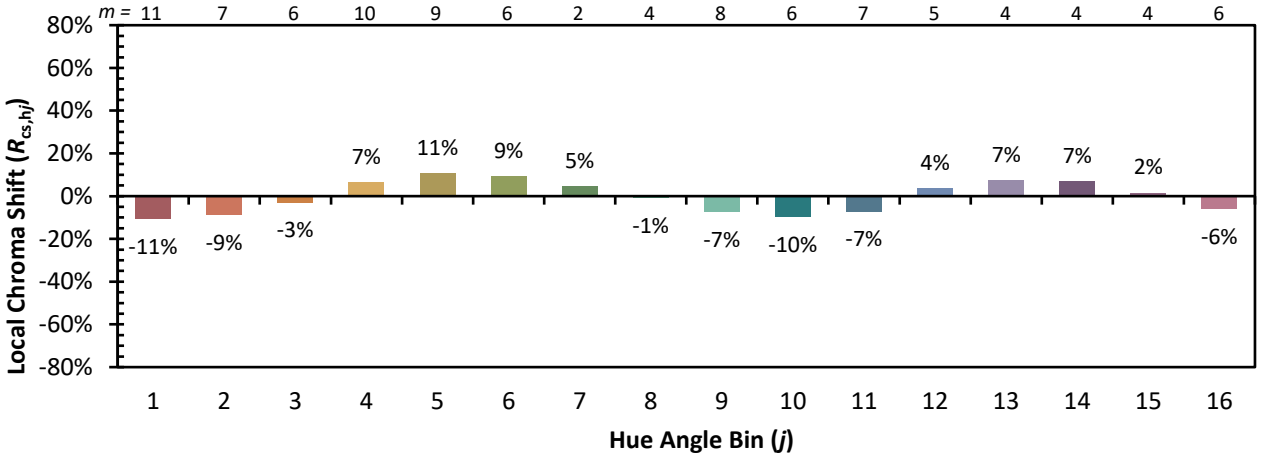
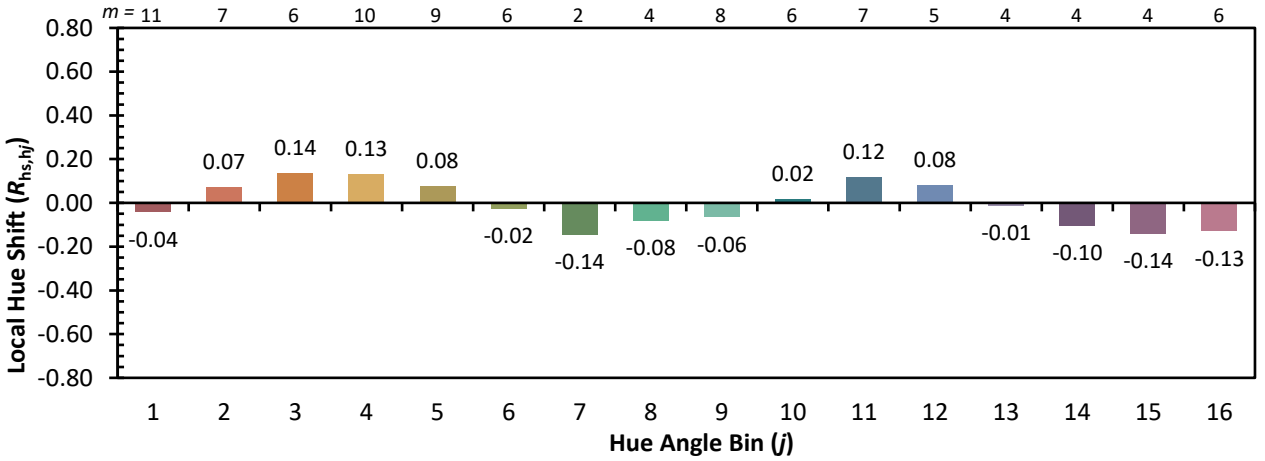
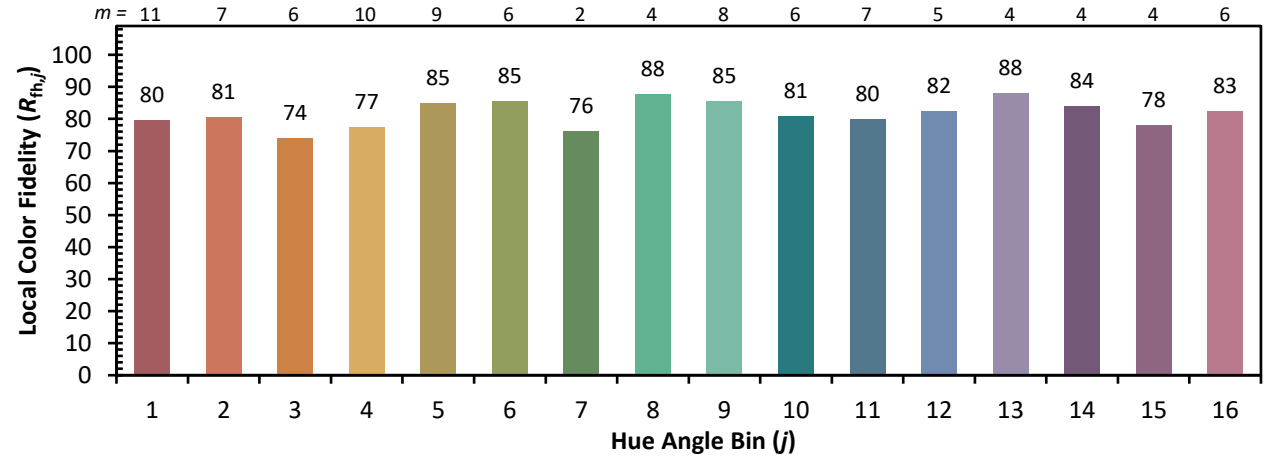
Color Rendition by Hue-Angle Bin







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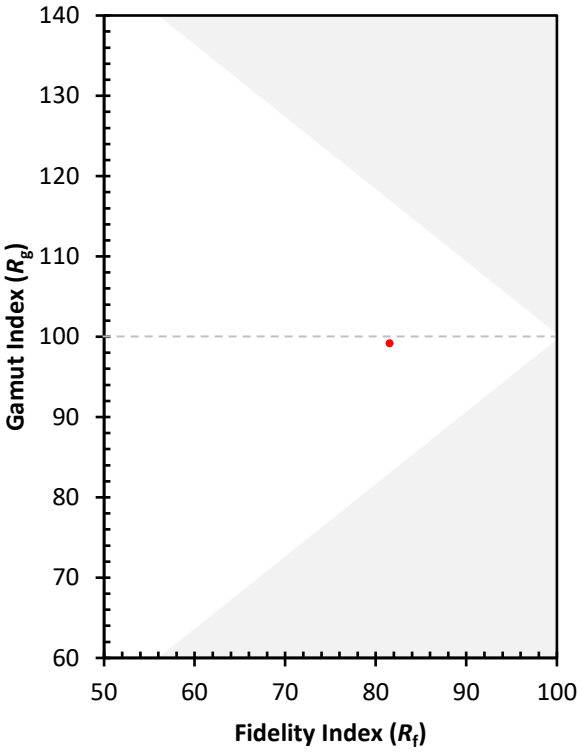
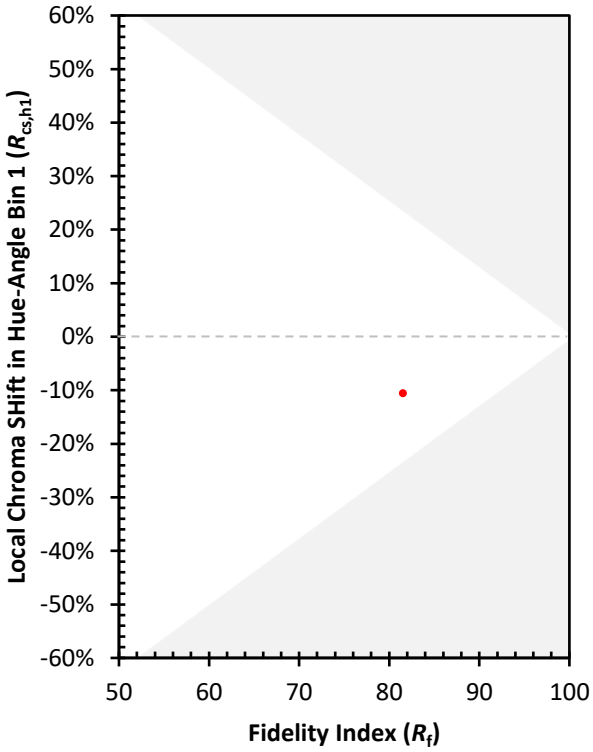
Measure Comparisons





(END OF REPORT)