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: P639988

Luminaire Tested: GWS-SA5C-830-U-T3R-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:	P639988
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-15)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5C-830-U-T3R-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19230.3 lumens
Efficiency:	N/A
Efficacy:	122.1 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B3 - U0 - G3

Input Watts (W):	157.5
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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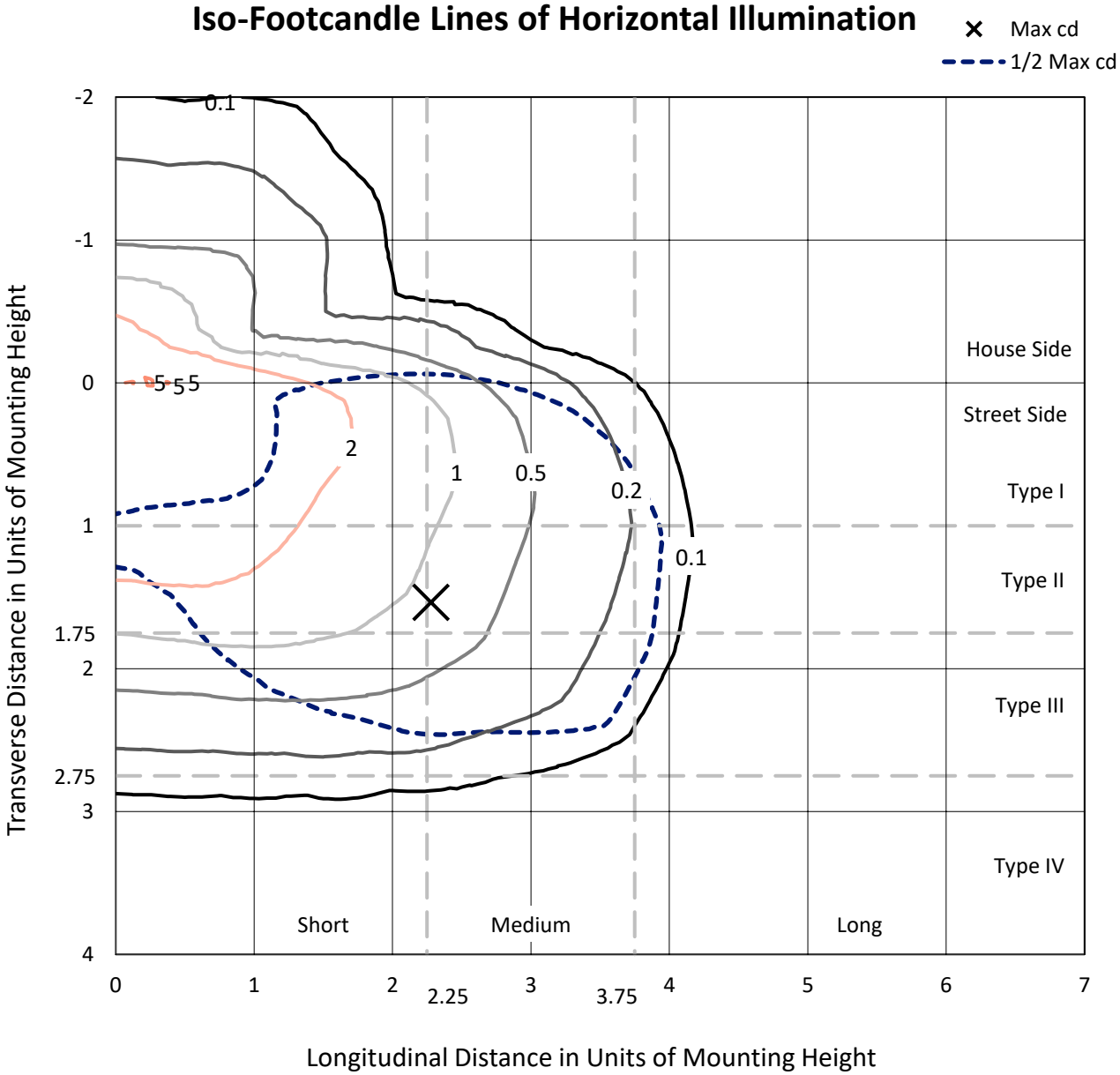
Scaled Data Report

REPORT NUMBER: P639988
CATALOG NUMBER: GWS-SA5C-830-U-T3R-W

Iso-Footcandle Lines of Horizontal Illumination



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

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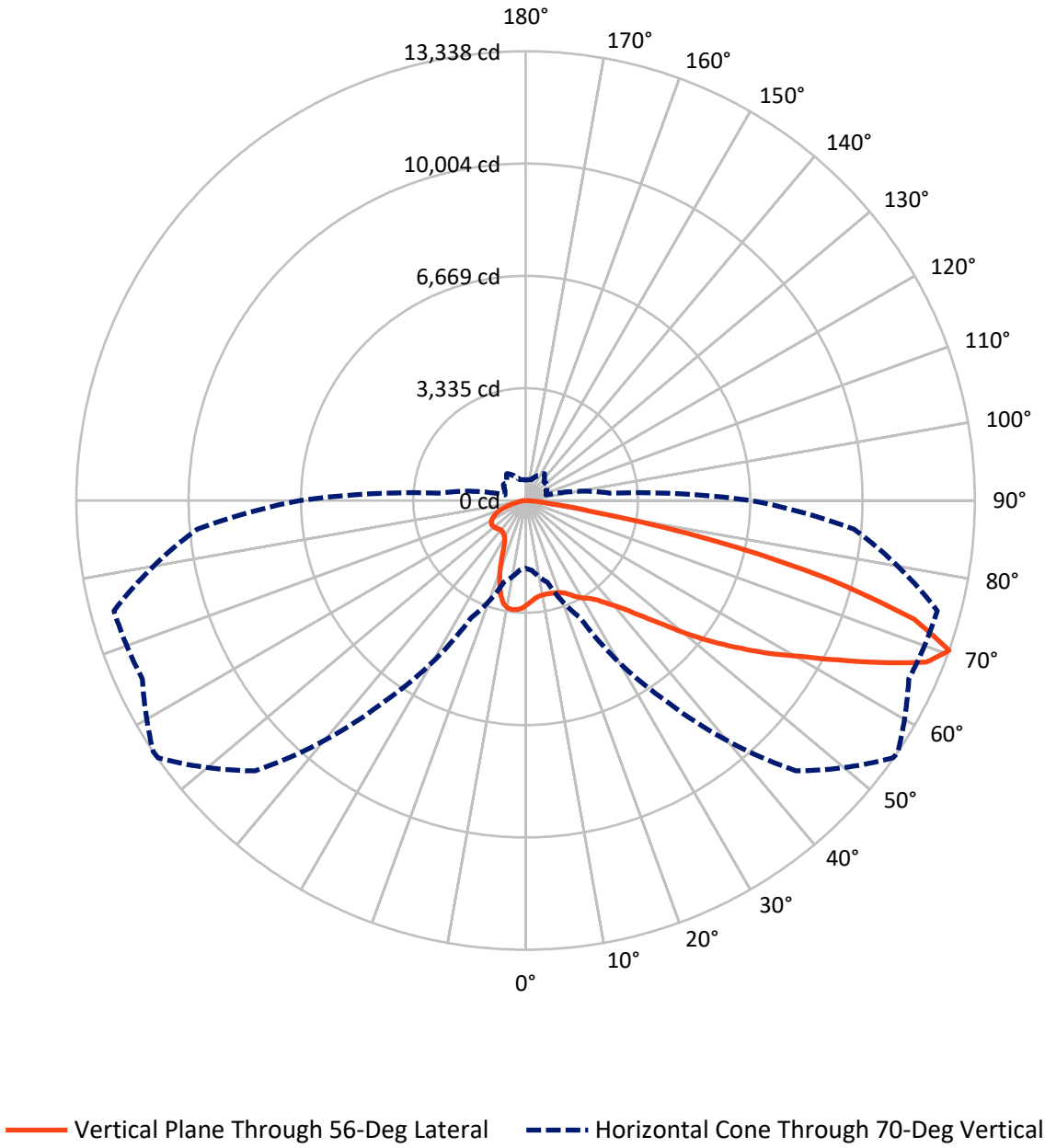
Luminous Intensity Polar Plot



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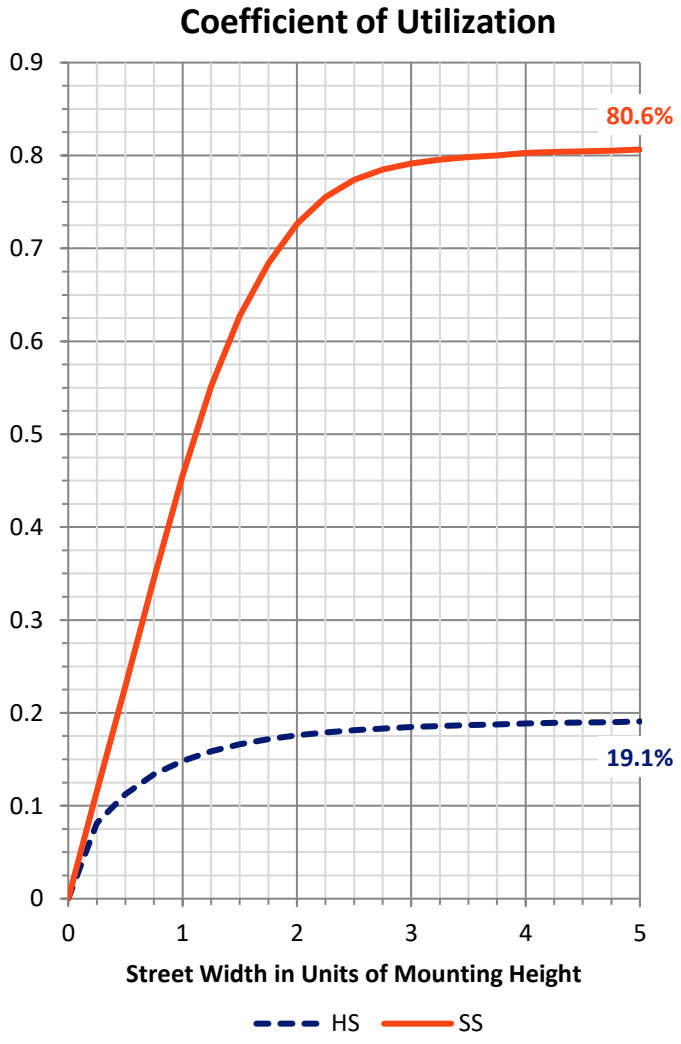
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3697.1	0.0	3697.1
	% Fixture	19.2	0.0	19.2
Street Side	Lumens	15533.2	0.0	15533.2
	% Fixture	80.8	0.0	80.8
Total	Lumens	19230.3	0.0	19230.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.2	1.5
10°-20°	778.3	4.0
20°-30°	1286.8	6.7
30°-40°	1923.9	10.0
40°-50°	2863.0	14.9
50°-60°	4070.3	21.2
60°-70°	5041.2	26.2
70°-80°	2783.6	14.5
80°-90°	196.0	1.0
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°	19230.3	100.0
0°-180°	19230.3	100.0



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REPORT NUMBER: P639988
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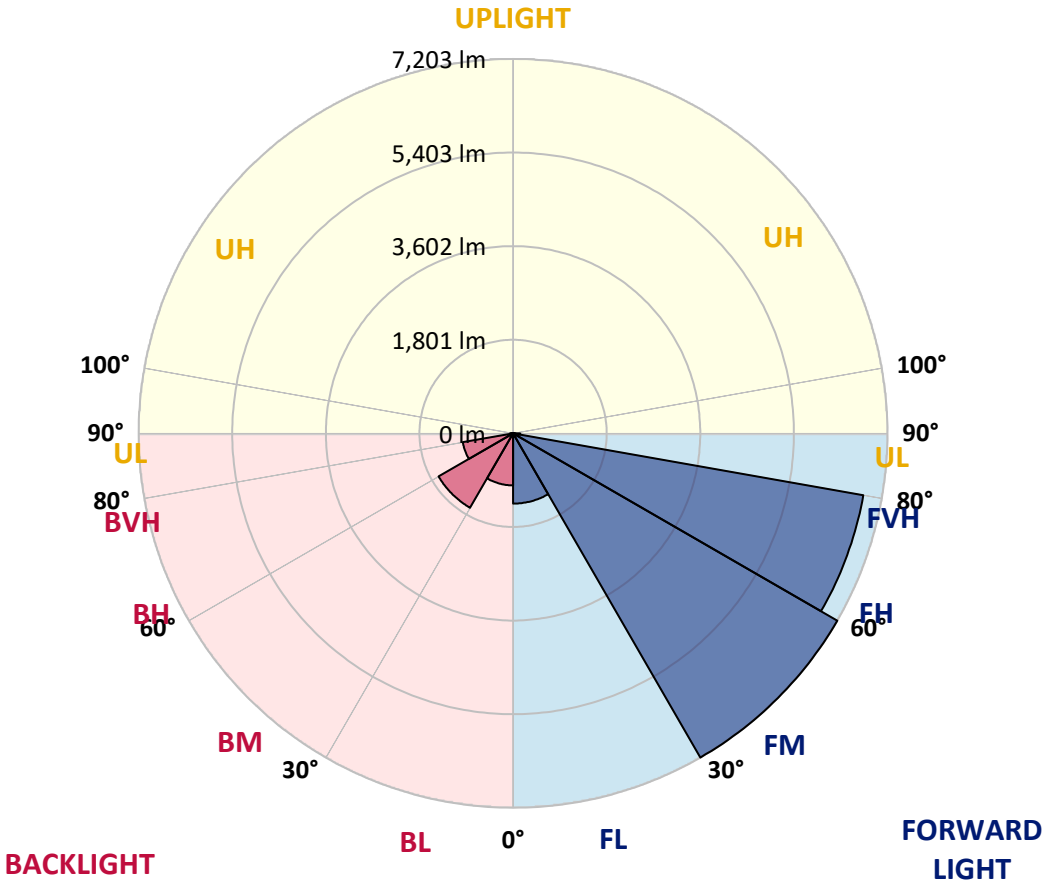
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1351.5	7.0			
FM	(30°-60°)	7203.4	37.5			
FH	(60°-80°)	6842.2	35.6			G3/7500
FVH	(80°-90°)	136.2	0.7			G2/225
BL	(0°-30°)	1000.8	5.2	B3/2500		
BM	(30°-60°)	1653.8	8.6	B2/2500		
BH	(60°-80°)	982.7	5.1	B2/1000		G2/1000
BVH	(80°-90°)	59.8	0.3			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 Medium



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REPORT NUMBER: P639988
CATALOG NUMBER: GWS-SA5C-830-U-T3R-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1
2.5°	2904.7	2888.4	2907.4	2916.9	2941.3	2976.6	3007.8	3009.1	3025.4	3064.7	3102.7
5°	2773.2	2765.0	2770.5	2798.9	2824.7	2869.5	2916.9	2921.0	2967.1	3044.4	3120.3
7.5°	2671.5	2660.6	2681.0	2717.6	2750.1	2800.3	2862.7	2868.1	2933.2	3049.8	3166.4
10°	2525.0	2516.9	2554.9	2603.7	2674.2	2756.9	2839.6	2846.4	2931.8	3085.1	3247.8
12.5°	2461.3	2461.3	2477.6	2523.7	2601.0	2710.8	2835.6	2846.4	2953.5	3139.3	3352.2
15°	2560.3	2567.1	2553.5	2550.8	2582.0	2686.4	2841.0	2857.3	2994.2	3194.9	3455.3
17.5°	2759.6	2766.4	2731.1	2675.5	2644.4	2709.4	2861.3	2879.0	3037.6	3255.9	3566.5
20°	3039.0	3047.1	2969.8	2884.4	2777.3	2775.9	2900.7	2916.9	3093.2	3322.4	3684.5
22.5°	3365.8	3371.2	3273.6	3138.0	2973.9	2899.3	2968.5	2984.7	3165.1	3414.6	3811.9
25°	3744.1	3760.4	3642.4	3445.8	3223.4	3068.8	3081.0	3100.0	3293.9	3538.0	3962.5
27.5°	4148.2	4168.6	4033.0	3816.0	3509.5	3255.9	3226.1	3242.4	3430.9	3614.0	4042.5
30°	4561.9	4576.8	4441.2	4193.0	3817.4	3467.5	3348.2	3357.7	3490.5	3650.6	4123.8
32.5°	5021.6	5009.4	4879.2	4593.0	4172.7	3721.1	3462.1	3459.4	3557.0	3723.8	4240.5
35°	5452.8	5470.4	5332.1	5016.1	4563.2	4034.3	3632.9	3622.1	3698.0	3843.1	4404.5
37.5°	5974.9	5969.5	5804.0	5462.3	4955.1	4334.0	3873.0	3854.0	3881.1	4028.9	4633.7
40°	6347.8	6385.8	6278.6	5960.0	5413.5	4702.9	4153.7	4111.6	4118.4	4258.1	4940.2
42.5°	6652.9	6688.2	6699.0	6495.6	5938.3	5158.5	4503.5	4461.5	4465.6	4663.6	5317.2
45°	6887.5	6935.0	7088.2	7028.6	6529.5	5684.7	4976.8	4933.4	4936.1	5155.8	5772.8
47.5°	6983.8	7035.3	7345.9	7488.3	7157.4	6313.9	5565.4	5501.6	5511.1	5753.8	6293.6
50°	6952.6	7021.8	7442.2	7842.2	7683.5	6954.0	6269.2	6224.4	6187.8	6540.4	6859.1
52.5°	6684.1	6760.1	7432.7	8067.3	8113.4	7558.8	6996.0	6970.2	6962.1	7375.7	7491.0
55°	5893.5	6021.0	7105.9	8127.0	8449.7	8128.3	7783.9	7740.5	7782.5	8270.7	8129.7
57.5°	5455.5	5550.4	6465.8	8060.5	8725.0	8670.8	8570.4	8574.5	8622.0	9243.0	8904.0
60°	5206.0	5317.2	6110.5	7878.8	8989.5	9329.8	9393.6	9393.6	9479.0	10291.3	9690.5
62.5°	4875.1	4987.7	5778.3	7529.0	9233.5	10105.5	10428.3	10424.2	10458.1	11415.5	10459.4
65°	4203.8	4308.3	5111.1	6977.0	9352.9	10959.8	11604.0	11591.8	11524.0	12416.3	10968.0
67.5°	3052.5	3151.5	3915.0	5927.4	8923.0	11648.7	12815.0	12820.4	12414.9	13046.8	10995.1
70°	2012.4	2080.2	2516.9	3849.9	7256.4	11351.7	13322.1	13338.4	12551.9	12653.6	9785.5
72.5°	1255.7	1303.2	1571.7	2295.8	4287.9	8985.4	12020.3	12065.0	11292.1	11119.9	8040.2
75°	834.0	866.5	1045.5	1338.5	1983.9	4862.9	9137.3	9281.0	9050.5	8716.9	5602.0
77.5°	501.7	528.9	665.8	850.3	878.7	1899.9	5333.5	5705.0	5737.6	4551.0	2346.0
80°	229.2	260.4	367.5	485.5	467.8	661.8	1880.9	1967.7	2321.6	1445.6	740.4
82.5°	135.6	149.2	244.1	241.4	199.3	321.4	676.7	694.3	589.9	528.9	316.0
85°	54.2	63.7	103.1	90.9	73.2	104.4	254.9	267.1	256.3	230.5	116.6
87.5°	0.0	0.0	0.0	0.0	1.4	2.7	23.1	24.4	35.3	63.7	35.3
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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Scaled Data Report

REPORT NUMBER: P639988
CATALOG NUMBER: GWS-SA5C-830-U-T3R-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1	3104.1
2.5°	3127.1	3119.0	3159.7	3190.9	3204.4	3218.0	3205.8	3201.7	3201.7	3174.6	3161.0
5°	3161.0	3165.1	3220.7	3246.5	3246.5	3235.6	3203.1	3180.0	3171.9	3136.6	3127.1
7.5°	3224.8	3242.4	3293.9	3292.6	3254.6	3194.9	3113.6	3051.2	2994.2	2969.8	2954.9
10°	3329.2	3352.2	3387.5	3330.5	3224.8	3067.5	2895.2	2759.6	2678.3	2613.2	2613.2
12.5°	3448.5	3470.2	3463.4	3331.9	3113.6	2819.3	2571.1	2415.2	2301.3	2241.6	2241.6
15°	3567.8	3585.5	3512.2	3269.5	2881.7	2489.8	2218.5	2031.4	1932.4	1876.8	1876.8
17.5°	3688.5	3687.2	3532.6	3125.8	2579.3	2125.0	1859.2	1714.1	1680.2	1670.7	1669.3
20°	3805.2	3774.0	3506.8	2885.7	2228.0	1757.5	1589.3	1598.8	1649.0	1670.7	1673.4
22.5°	3936.7	3859.4	3430.9	2579.3	1829.4	1502.5	1513.4	1592.0	1665.3	1697.8	1701.9
25°	4071.0	3932.6	3303.4	2219.9	1495.8	1409.0	1493.0	1581.2	1663.9	1705.9	1710.0
27.5°	4125.2	3932.6	3086.4	1803.6	1318.1	1369.6	1461.9	1547.3	1634.1	1682.9	1692.4
30°	4169.9	3898.7	2782.7	1428.0	1244.9	1331.7	1411.7	1490.3	1575.8	1635.4	1646.3
32.5°	4232.3	3868.9	2415.2	1200.1	1211.0	1295.1	1350.7	1417.1	1494.4	1533.7	1529.7
35°	4305.6	3822.8	1971.7	1091.6	1182.5	1263.9	1303.2	1342.5	1307.3	1305.9	1310.0
37.5°	4410.0	3782.1	1585.3	1042.8	1163.5	1242.2	1274.7	1190.6	1141.8	1121.5	1113.3
40°	4560.5	3765.8	1250.3	1014.3	1160.8	1240.8	1217.8	1087.6	1021.1	950.6	949.3
42.5°	4750.3	3753.6	1033.3	1000.8	1170.3	1272.0	1139.1	1019.8	882.8	851.6	848.9
45°	4994.4	3734.6	924.8	998.1	1193.4	1296.4	1131.0	926.2	832.6	819.1	819.1
47.5°	5288.7	3704.8	876.0	998.1	1219.1	1285.6	1106.6	905.9	809.6	824.5	834.0
50°	5626.4	3666.8	850.3	995.4	1244.9	1285.6	1055.0	901.8	804.2	881.5	912.6
52.5°	5987.1	3623.4	832.6	984.5	1262.5	1286.9	1057.7	915.4	809.6	895.0	920.8
55°	6385.8	3616.7	808.2	961.5	1267.9	1251.7	1064.5	945.2	817.7	810.9	812.3
57.5°	6888.9	3698.0	790.6	927.6	1246.2	1179.8	1078.1	966.9	808.2	809.6	819.1
60°	7415.0	3851.3	805.5	895.0	1201.5	1112.0	1087.6	956.0	762.1	740.4	743.1
62.5°	7862.5	3967.9	817.7	880.1	1136.4	1052.3	1078.1	931.6	736.4	730.9	743.1
65°	8049.7	3871.6	787.9	848.9	1041.5	979.1	1057.7	900.4	714.7	694.3	695.7
67.5°	7842.2	3420.0	729.6	779.7	934.3	885.5	1025.2	859.8	684.8	660.4	655.0
70°	*6699.0*	*2512.8*	*629.2*	*669.9*	*804.2*	*775.7*	*975.0*	*806.9*	*637.4*	*619.7*	*607.5*
72.5°	5398.6	1779.2	522.1	532.9	630.6	653.6	888.2	740.4	583.1	532.9	515.3
75°	3757.7	1117.4	435.3	424.5	455.6	499.0	693.0	614.3	503.1	450.2	433.9
77.5°	1616.4	573.6	340.4	335.0	303.8	345.8	531.6	512.6	421.7	360.7	351.2
80°	541.1	332.2	245.5	236.0	202.1	242.7	374.3	409.5	330.9	267.1	250.9
82.5°	271.2	192.6	155.9	141.0	135.6	153.2	221.0	254.9	229.2	184.4	155.9
85°	132.9	109.8	85.4	84.1	70.5	66.4	92.2	108.5	103.1	75.9	71.9
87.5°	48.8	43.4	27.1	21.7	13.6	9.5	5.4	5.4	4.1	4.1	4.1
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

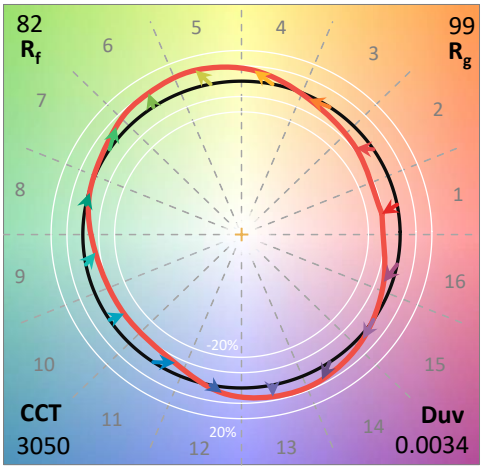
Test Information

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

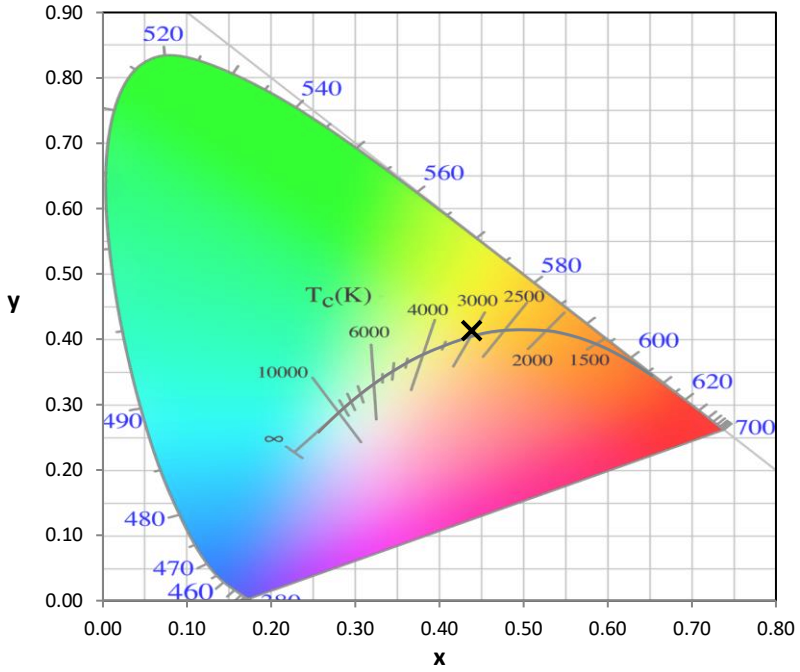
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

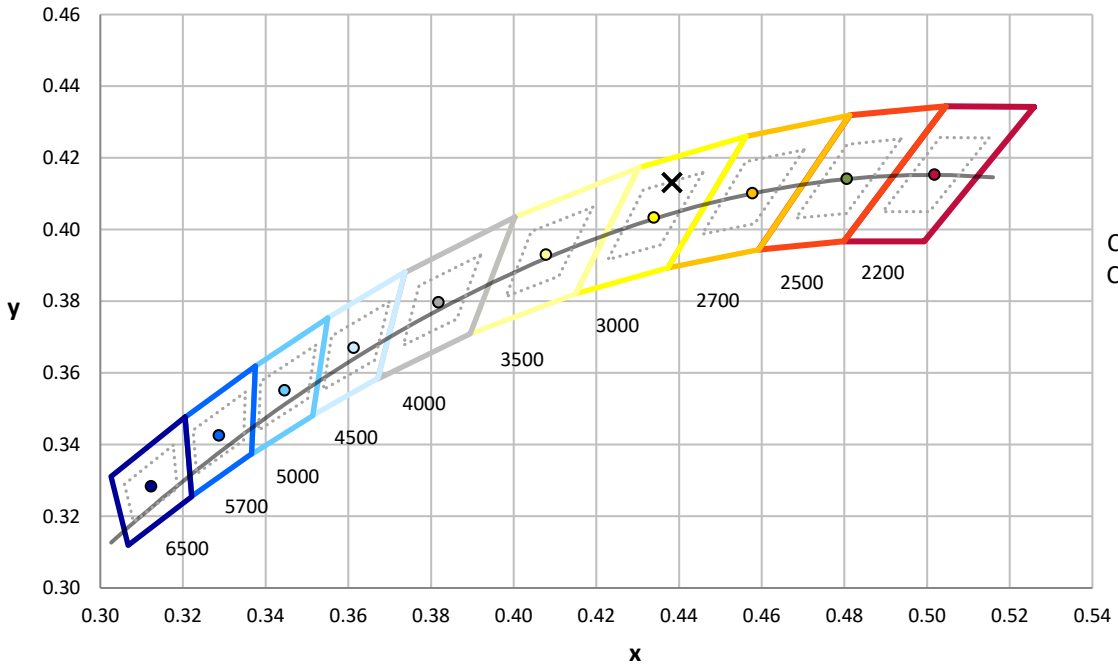
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

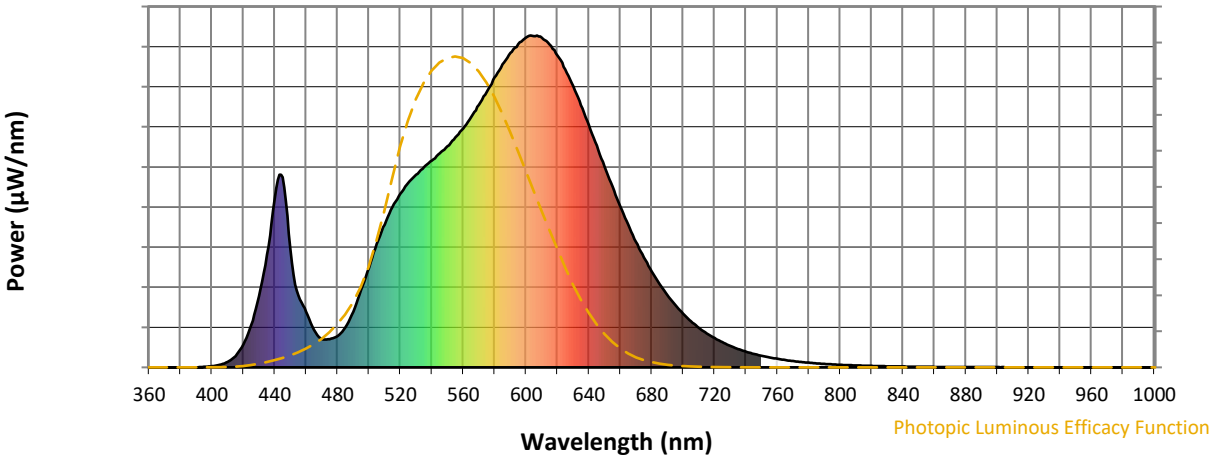


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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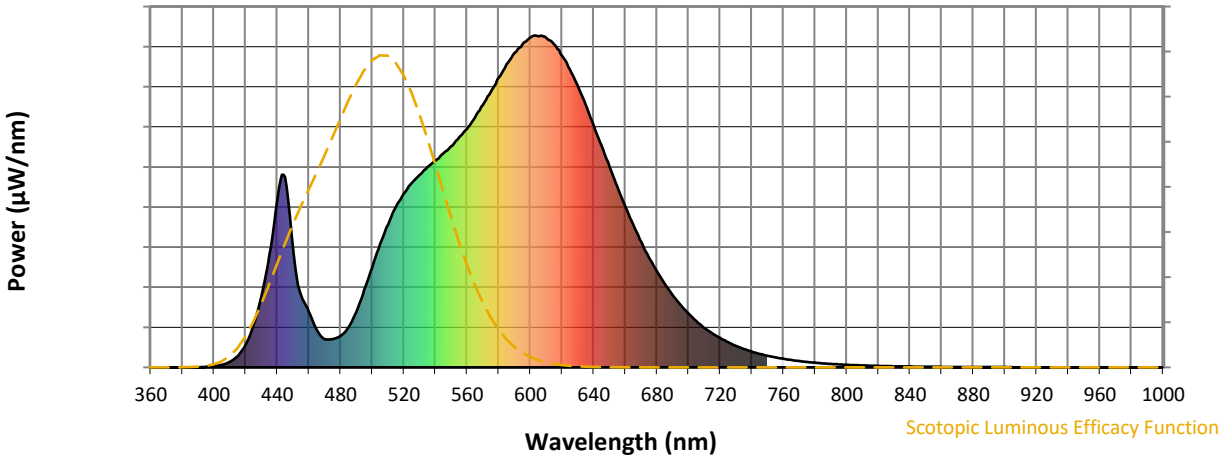
Scotopic Flux vs. Wavelength



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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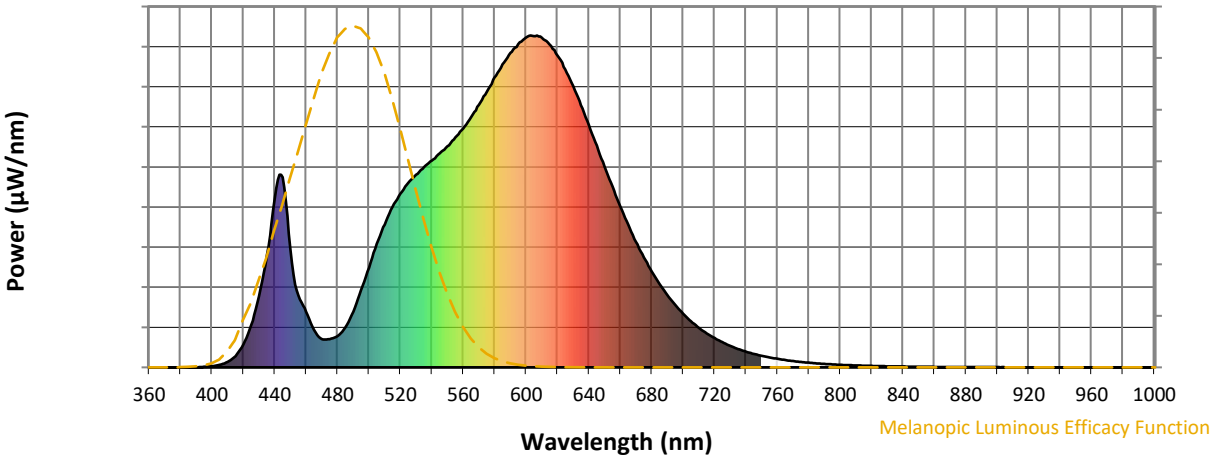
Melanopic Flux vs. Wavelength



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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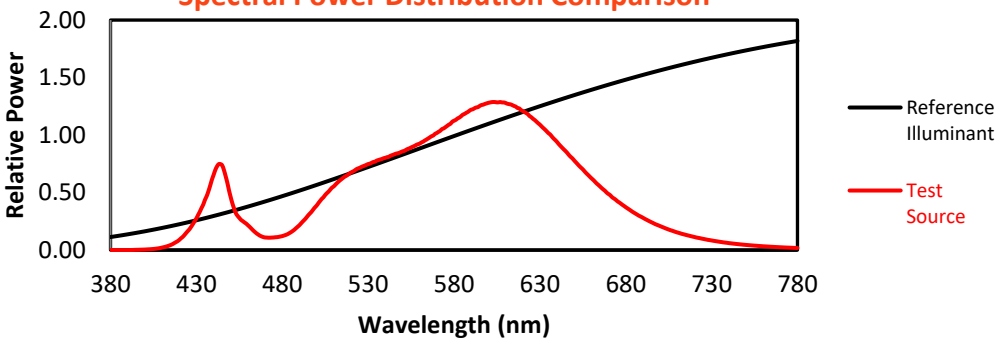
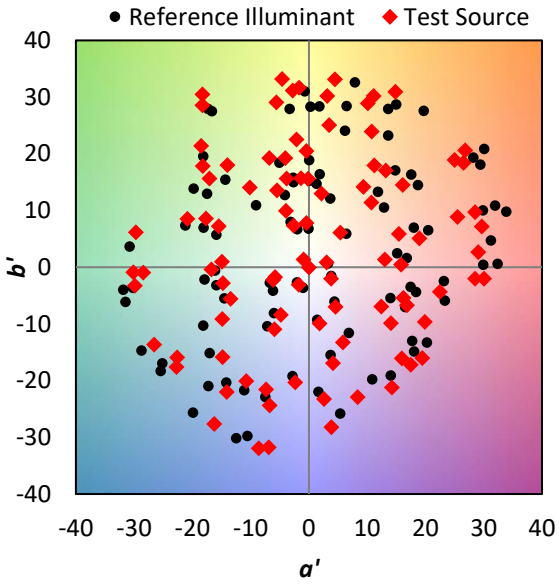
Summary

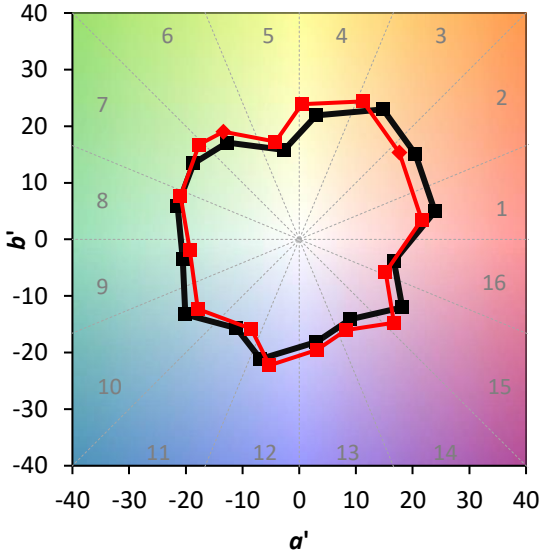
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

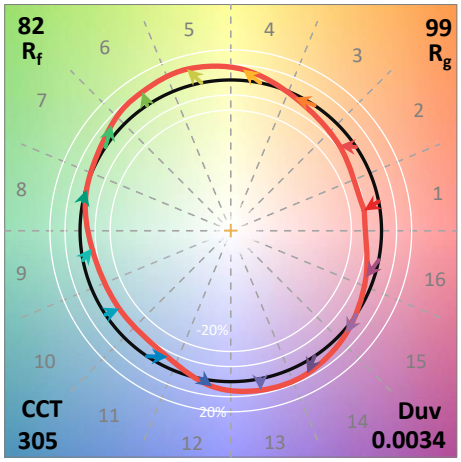
Spectral Power Distribution Comparison

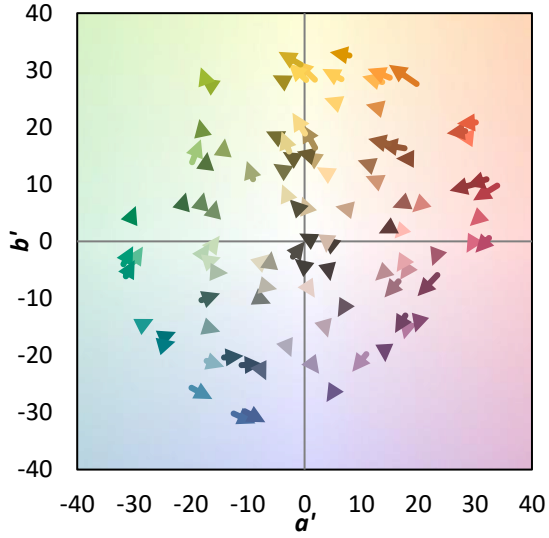


Color Vector Graphics









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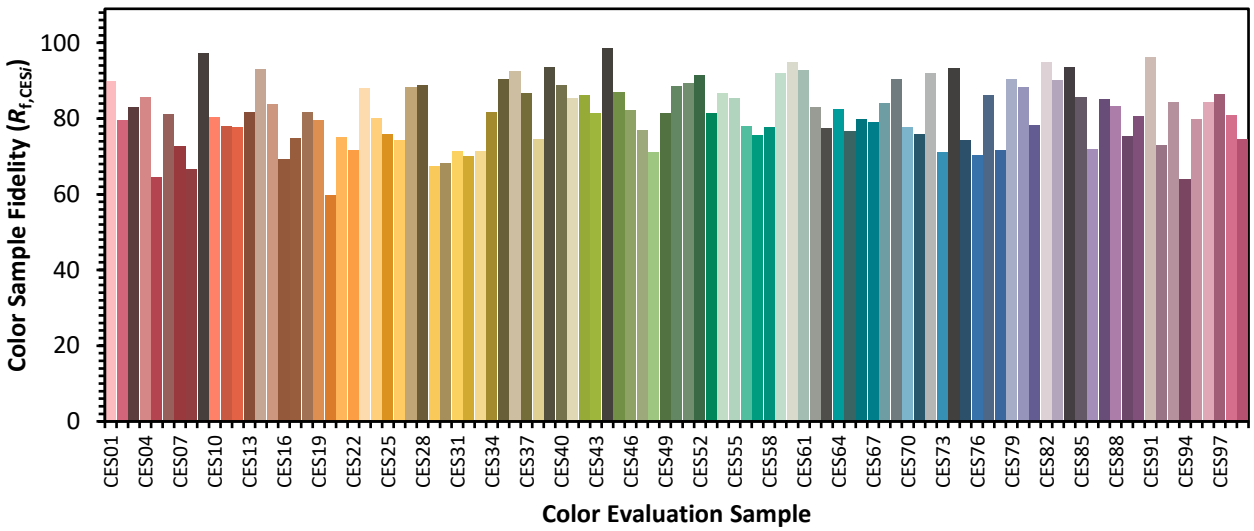
Individual Sample Fidelity Index ($R_{f,i}$)

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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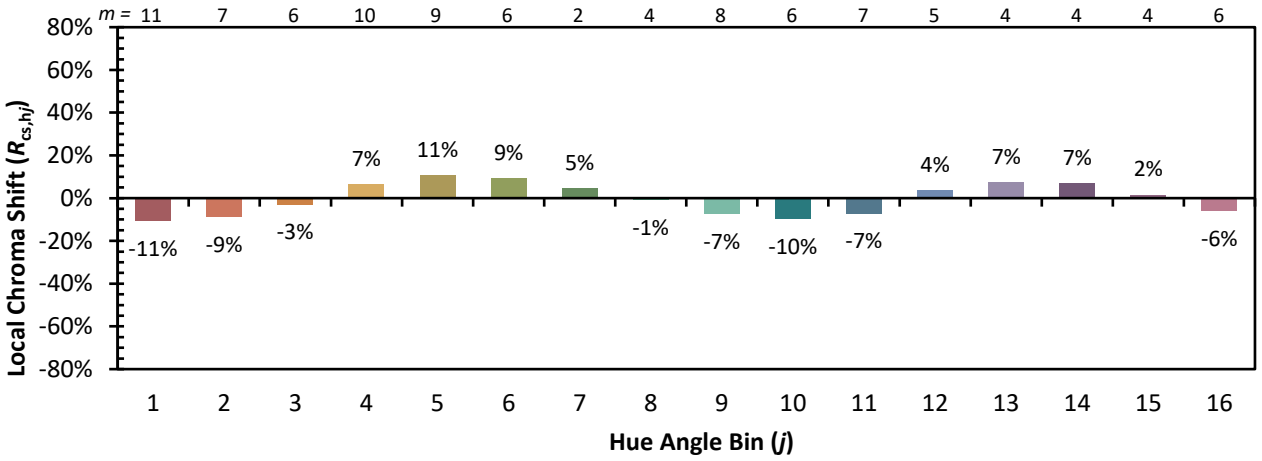
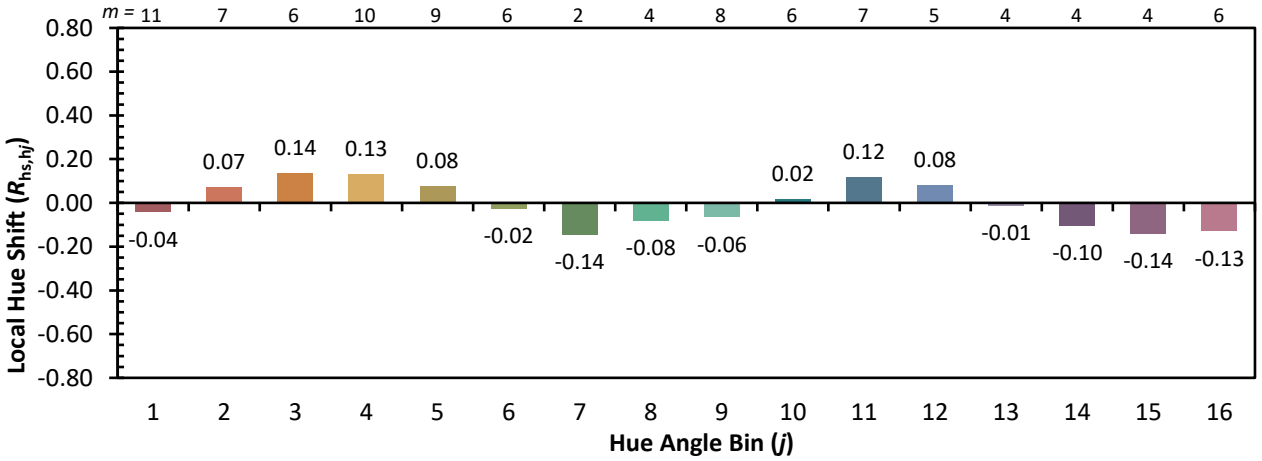
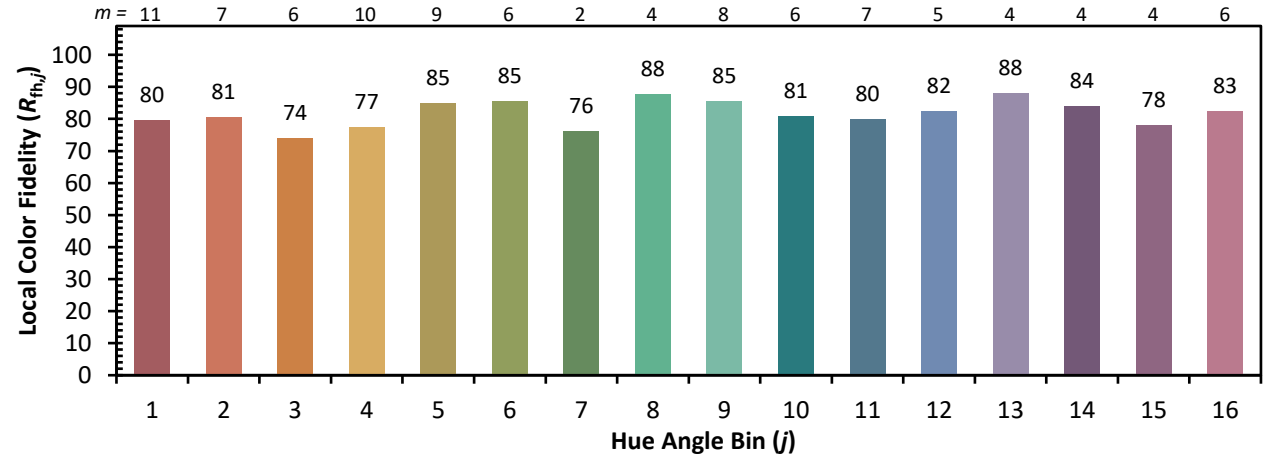
Color Rendition by Hue-Angle Bin







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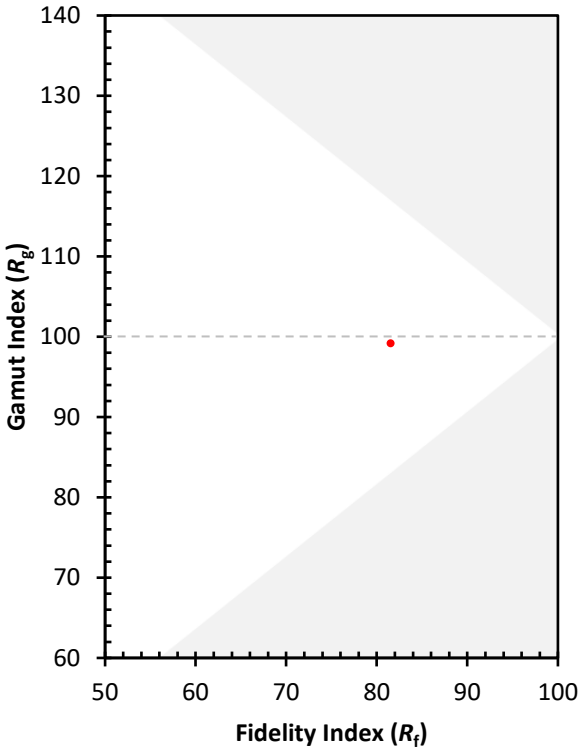
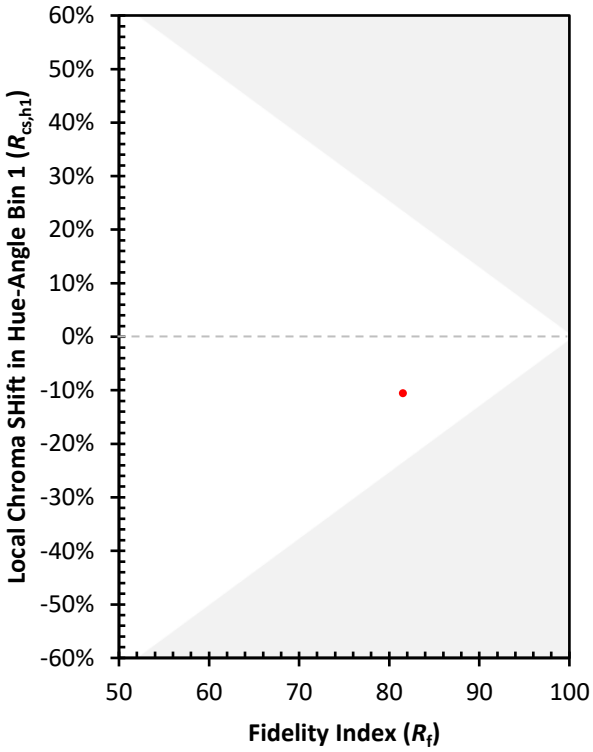
Measure Comparisons





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