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: P631563

Luminaire Tested: GWS-SA1F-830-U-T2R-W-GRSWH

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:	P631563
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-13)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1F-830-U-T2R-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5890.2 lumens
Efficiency:	N/A
Efficacy:	87.7 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G1

Input Watts (W):	67.2
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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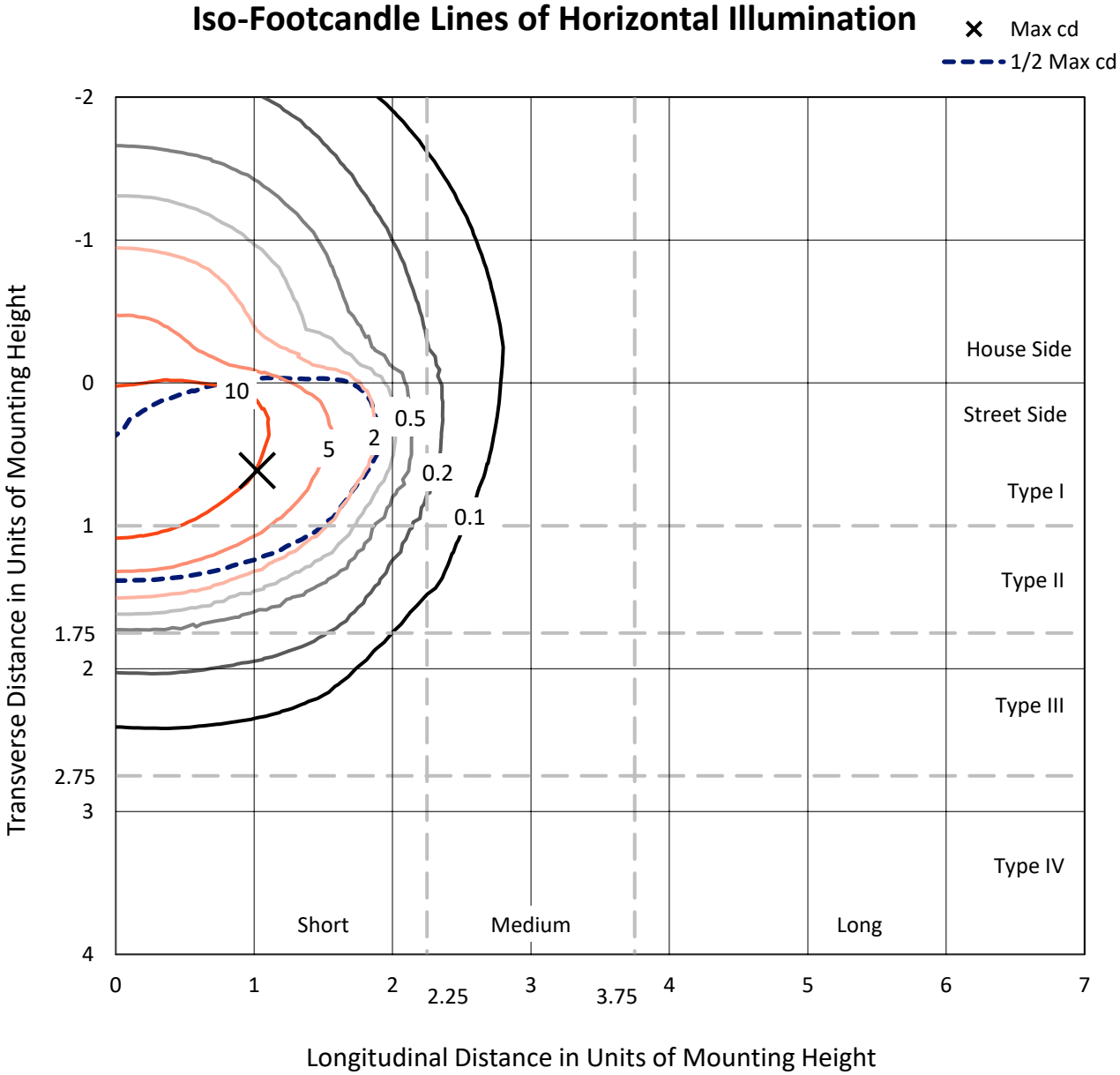
REPORT NUMBER: P631563
CATALOG NUMBER: GWS-SA1F-830-U-T2R-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 17.6 fc
Type II - Short - N/A

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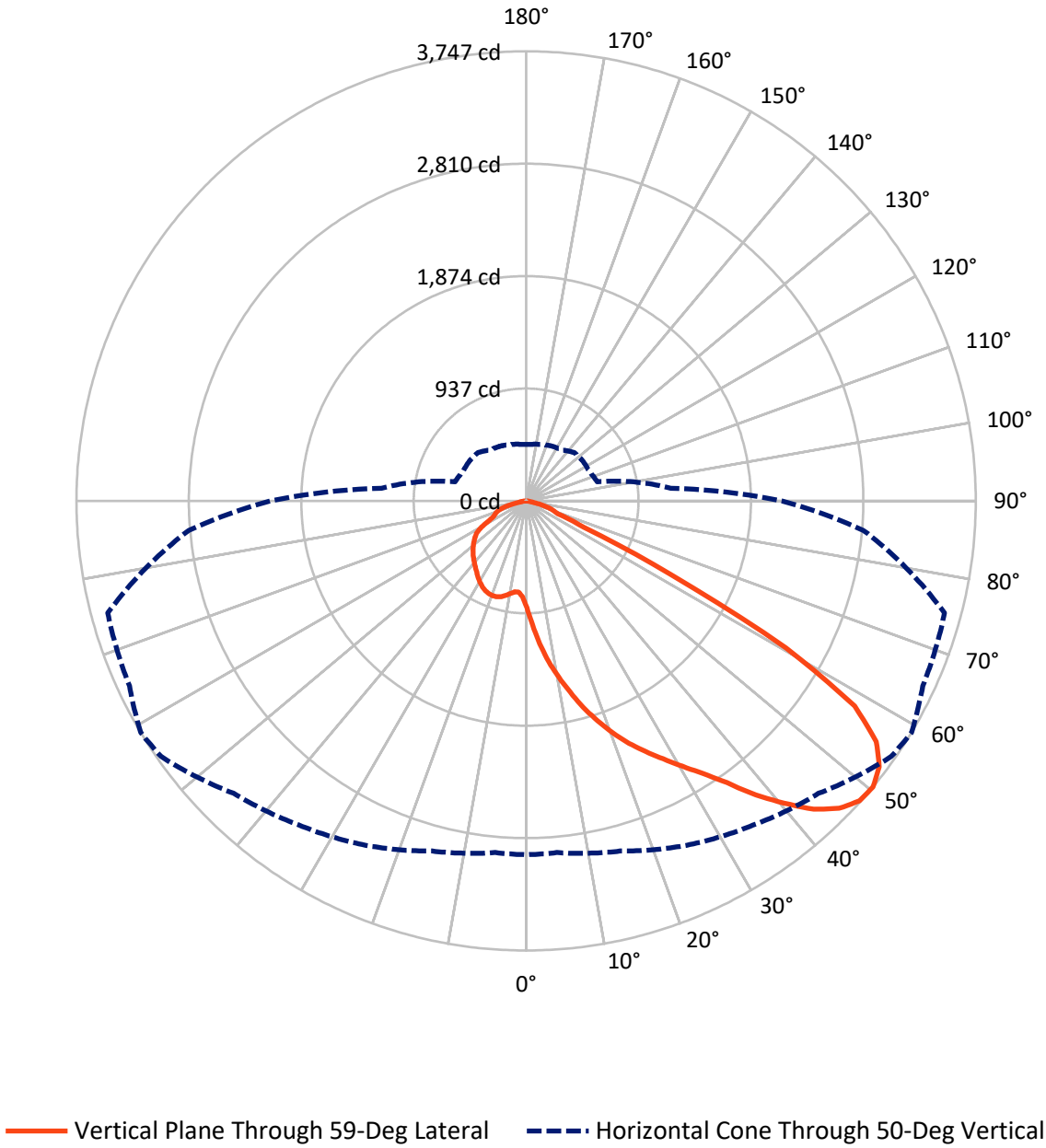
Luminous Intensity Polar Plot



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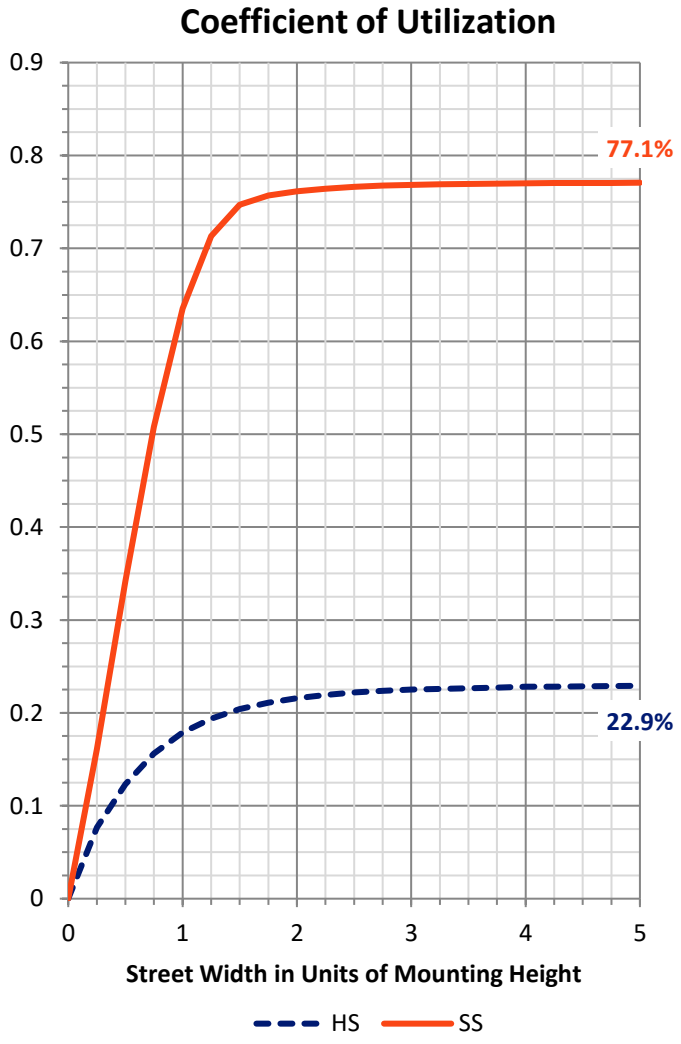
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1354.8	0.0	1354.8
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	4535.3	0.0	4535.3
	% Fixture	77.0	0.0	77.0
Total	Lumens	5890.2	0.0	5890.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.1	1.7
10°-20°	363.4	6.2
20°-30°	688.2	11.7
30°-40°	1141.2	19.4
40°-50°	1559.0	26.5
50°-60°	1415.1	24.0
60°-70°	471.3	8.0
70°-80°	137.4	2.3
80°-90°	14.4	0.2
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°	5890.2	100.0
0°-180°	5890.2	100.0



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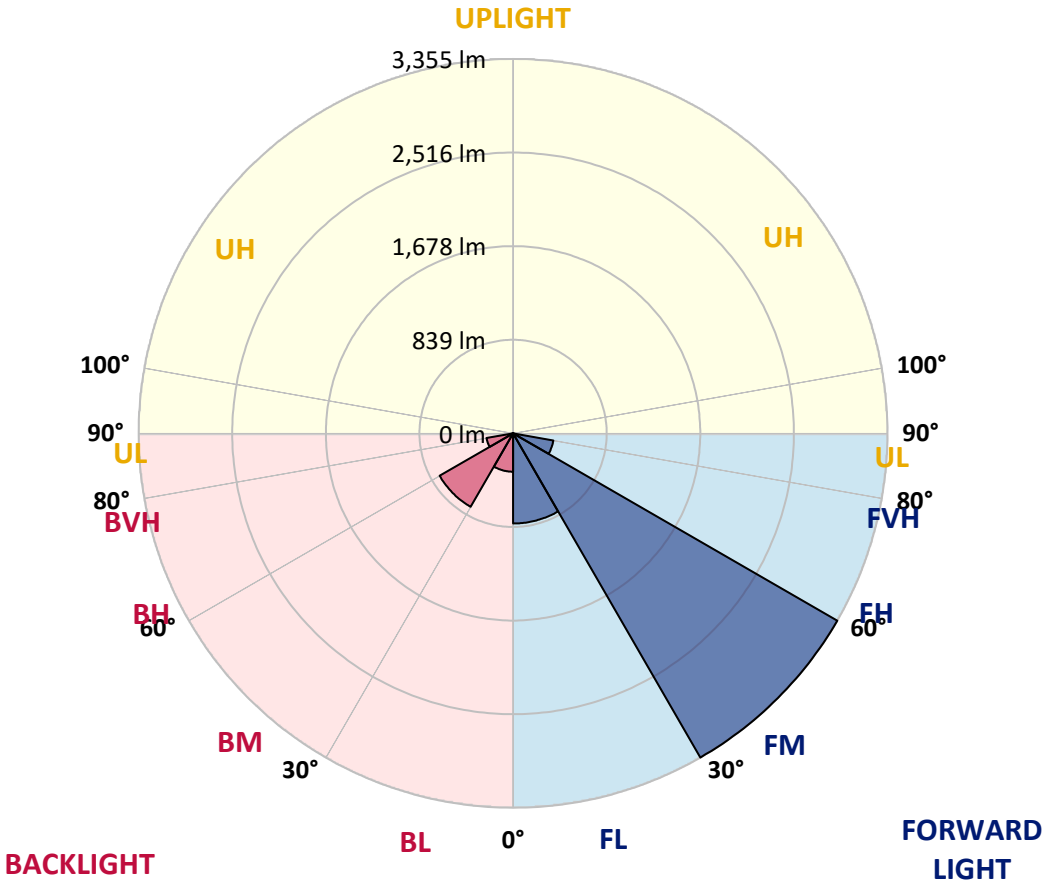
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	807.7	13.7			
FM	(30°-60°)	3355.1	57.0			
FH	(60°-80°)	366.9	6.2			G0/660
FVH	(80°-90°)	5.6	0.1			G0/10
BL	(0°-30°)	344.0	5.8	B1/500		
BM	(30°-60°)	760.2	12.9	B1/1000		
BH	(60°-80°)	241.8	4.1	B1/500		G1/500
BVH	(80°-90°)	8.8	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
Type II Short



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Scaled Data Report

REPORT NUMBER: P631563
CATALOG NUMBER: GWS-SA1F-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	892.4	892.4	892.4	892.4	892.4	892.4	892.4	*892.4*	892.4	892.4	892.4
2.5°	1156.3	1164.9	1151.5	1152.5	1118.9	1103.5	1060.3	*1034.9*	1018.1	971.1	928.4
5°	1389.5	1379.4	1368.8	1362.6	1333.3	1292.1	1238.3	*1195.6*	1156.3	1064.2	975.4
7.5°	1532.4	1527.2	1520.0	1516.1	1487.3	1444.2	1390.4	*1354.0*	1296.9	1172.1	1032.5
10°	1653.8	1647.6	1643.3	1646.2	1622.6	1594.8	1536.3	*1494.5*	1430.3	1286.3	1101.6
12.5°	1747.9	1751.2	1752.7	1768.0	1757.9	1741.2	1680.7	*1636.6*	1565.1	1406.7	1182.7
15°	1822.2	1821.3	1838.1	1867.3	1883.7	1873.1	1824.6	*1787.7*	1700.4	1525.2	1270.0
17.5°	1839.5	1840.5	1866.9	1918.2	1971.5	1997.4	1970.0	*1925.9*	1839.5	1642.3	1360.7
20°	1853.4	1855.3	1882.7	1941.2	2019.0	2091.4	2095.7	*2064.1*	1989.7	1769.0	1452.8
22.5°	1941.2	1945.5	1952.7	1989.7	2059.7	2151.4	2201.8	*2195.0*	2132.7	1901.9	1552.1
25°	2172.0	2159.0	2124.0	2113.5	2140.3	2214.7	2300.6	*2313.5*	2282.8	2048.2	1659.1
27.5°	2457.0	2443.1	2391.3	2336.6	2278.5	2304.4	2396.1	*2434.9*	2435.4	2209.4	1766.6
30°	2715.6	2704.6	2662.3	2584.1	2483.9	2446.4	2514.1	*2566.4*	2597.6	2395.6	1888.9
32.5°	2936.8	2926.7	2869.6	2805.8	2707.9	2632.6	2657.1	*2707.4*	2780.4	2636.4	2041.0
35°	3122.9	3112.9	3058.2	2993.9	2903.2	2858.1	2849.5	*2884.0*	2978.5	2887.8	2215.7
37.5°	3274.1	3264.0	3206.9	3146.5	3077.4	3080.2	3093.2	*3110.0*	3164.2	3157.0	2402.3
40°	3372.0	3361.4	3320.6	3277.4	3233.8	3268.3	3332.6	*3312.5*	3341.2	3374.4	2574.1
42.5°	3415.6	3402.2	3378.7	3369.1	3355.6	3409.4	3533.2	*3513.0*	3478.5	3519.3	2701.7
45°	3372.0	3360.4	3360.0	3389.2	3420.4	3489.5	3671.8	*3655.5*	3568.2	3589.3	2778.0
47.5°	3238.1	3228.0	3255.4	3332.1	3408.9	3509.7	3733.7	*3736.6*	3632.0	3618.6	2827.4
50°	*2948.8*	*2942.1*	*3021.2*	*3166.6*	*3299.0*	*3446.8*	*3714.0*	*3747.1*	*3647.4*	*3609.5*	*2821.2*
52.5°	2360.6	2391.7	2564.0	2806.8	3063.9	3336.5	3641.1	*3684.3*	3573.5	3549.5	2787.6
55°	1615.9	1630.3	1802.6	2157.1	2565.0	3097.5	3473.7	*3540.4*	3486.1	3539.4	2822.6
57.5°	836.8	848.3	984.0	1298.8	1739.7	2447.9	3008.8	*3227.5*	3310.1	3590.3	2931.5
60°	343.5	353.1	409.3	561.4	877.5	1425.5	2165.3	*2489.6*	2683.5	3278.9	2603.3
62.5°	249.5	254.3	281.2	334.9	459.6	698.6	1225.4	*1344.8*	1481.1	2054.9	1652.9
65°	210.1	215.4	237.0	269.6	335.4	428.5	523.4	*526.3*	580.1	837.2	612.7
67.5°	176.1	180.9	200.1	227.9	271.1	304.2	281.2	*281.6*	280.7	303.7	293.6
70°	137.2	141.1	160.2	190.0	212.5	195.3	219.7	*243.3*	233.2	242.3	256.2
72.5°	100.3	104.6	121.4	143.9	138.2	139.1	178.0	*202.0*	196.2	206.3	219.3
75°	72.4	75.3	84.0	72.0	75.8	91.6	125.2	*138.2*	143.9	152.6	164.1
77.5°	23.5	23.5	26.4	33.1	41.3	50.9	63.8	*69.1*	77.7	87.3	95.5
80°	12.0	12.5	14.9	18.2	23.0	29.3	37.4	*39.8*	44.1	49.4	52.8
82.5°	5.8	6.2	7.2	9.1	12.0	15.4	20.6	*23.0*	25.9	29.3	31.7
85°	1.4	1.4	1.9	2.9	3.8	5.8	7.7	*9.1*	11.5	13.9	15.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.5	1.4	*1.9*	2.4	2.9	3.8
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: P631563
CATALOG NUMBER: GWS-SA1F-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	892.4	892.4	892.4	892.4	892.4	892.4	892.4	892.4	892.4	892.4	892.4
2.5°	909.2	882.3	847.8	818.5	791.7	771.0	753.3	744.6	736.5	730.7	732.6
5°	934.1	888.1	823.8	779.2	751.8	737.9	728.3	723.5	722.6	718.7	717.3
7.5°	970.6	904.9	819.0	773.9	755.7	748.5	743.2	740.3	741.8	737.9	736.5
10°	1015.7	932.7	831.0	791.2	775.3	770.1	764.3	760.5	758.5	752.8	751.8
12.5°	1071.8	967.3	852.6	813.2	797.4	788.3	780.6	773.9	769.6	762.4	760.5
15°	1132.3	1005.6	878.0	834.8	816.1	802.7	790.2	780.1	772.5	762.9	761.4
17.5°	1198.0	1045.9	899.1	849.7	825.7	808.0	789.7	774.9	764.3	751.8	750.4
20°	1266.6	1086.7	915.0	856.9	826.2	802.2	777.7	758.1	744.6	732.2	731.2
22.5°	1337.7	1124.1	924.6	855.0	818.5	788.8	759.5	737.4	721.6	706.7	705.8
25°	1409.1	1160.1	927.0	847.3	803.2	768.6	739.4	713.4	695.7	678.9	677.0
27.5°	1481.6	1190.4	921.2	832.0	782.5	745.1	715.8	690.4	672.2	655.4	652.5
30°	1558.8	1216.3	908.7	811.8	758.5	720.2	691.4	672.2	654.9	638.1	635.2
32.5°	1641.4	1238.8	891.0	787.3	730.7	695.2	674.1	656.8	639.6	624.7	621.8
35°	1739.7	1253.7	864.6	755.7	704.8	677.0	662.6	642.4	621.3	605.0	603.6
37.5°	1841.4	1265.2	832.9	725.4	682.3	666.4	654.4	627.1	600.7	581.0	578.6
40°	1939.8	1274.8	793.6	697.1	661.6	658.7	642.4	608.4	562.8	540.7	538.8
42.5°	2031.4	1277.7	752.3	666.9	642.9	641.5	623.2	570.5	535.4	521.5	519.6
45°	2094.3	1275.3	709.6	638.6	624.2	616.5	597.3	543.1	521.5	509.1	506.7
47.5°	2140.8	1262.8	661.6	608.9	603.1	592.5	551.3	525.8	505.7	493.2	490.8
50°	*2132.7*	*1211.0*	*613.2*	*580.1*	*577.7*	*568.5*	*517.7*	*504.3*	*486.5*	*473.1*	*471.2*
52.5°	2090.4	1112.6	563.8	548.4	553.2	535.4	493.7	478.3	463.0	447.6	444.3
55°	2101.0	1041.6	526.3	517.7	526.3	486.0	466.8	450.5	436.1	421.3	418.4
57.5°	2147.1	971.6	486.5	484.6	493.7	448.1	432.3	411.7	391.0	379.0	379.0
60°	1803.0	708.2	416.5	421.3	441.9	417.4	403.5	382.4	359.8	349.3	349.3
62.5°	1066.1	444.3	345.4	340.2	353.1	368.5	376.2	358.9	332.0	318.1	318.6
65°	469.7	323.4	304.7	300.3	296.5	307.1	328.2	329.6	301.3	285.0	285.5
67.5°	289.3	292.7	285.0	281.6	278.3	276.4	274.4	275.4	267.7	252.8	252.4
70°	261.0	270.1	264.8	262.0	257.6	254.3	242.8	224.1	211.1	207.3	211.6
72.5°	224.5	237.0	234.1	232.7	227.4	219.3	203.9	185.7	170.3	160.7	162.6
75°	169.4	179.4	180.9	181.4	175.6	167.9	152.1	136.7	123.3	113.2	115.6
77.5°	97.4	103.2	104.6	106.0	101.7	98.8	88.3	77.2	70.0	59.5	62.4
80°	54.2	56.6	56.6	57.1	54.7	51.3	44.1	37.9	34.5	29.7	30.2
82.5°	32.6	33.6	34.1	34.5	33.1	29.7	24.5	20.2	18.2	15.8	15.4
85°	15.8	16.8	16.8	17.3	14.9	13.0	10.1	7.7	6.7	4.8	5.3
87.5°	3.8	4.3	4.3	3.8	3.4	2.4	1.4	0.5	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

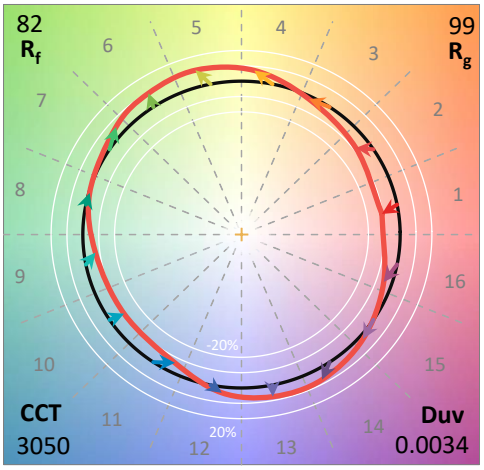
Test Information

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

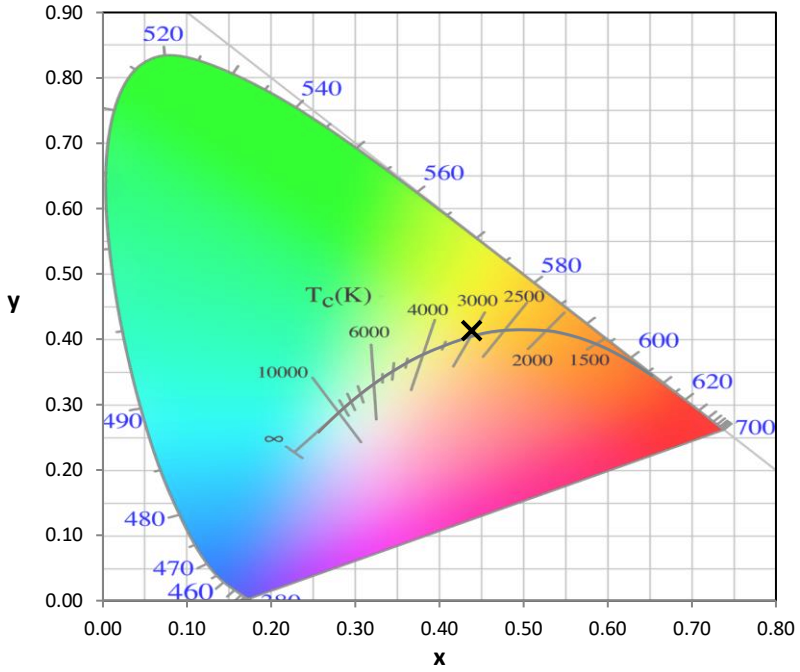
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

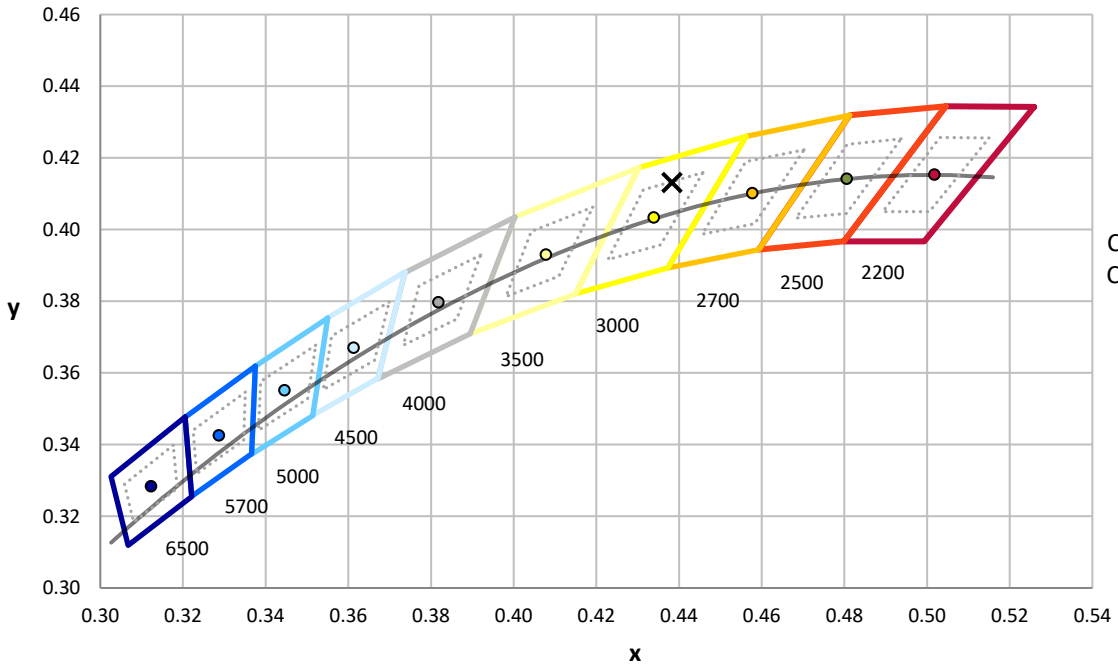
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

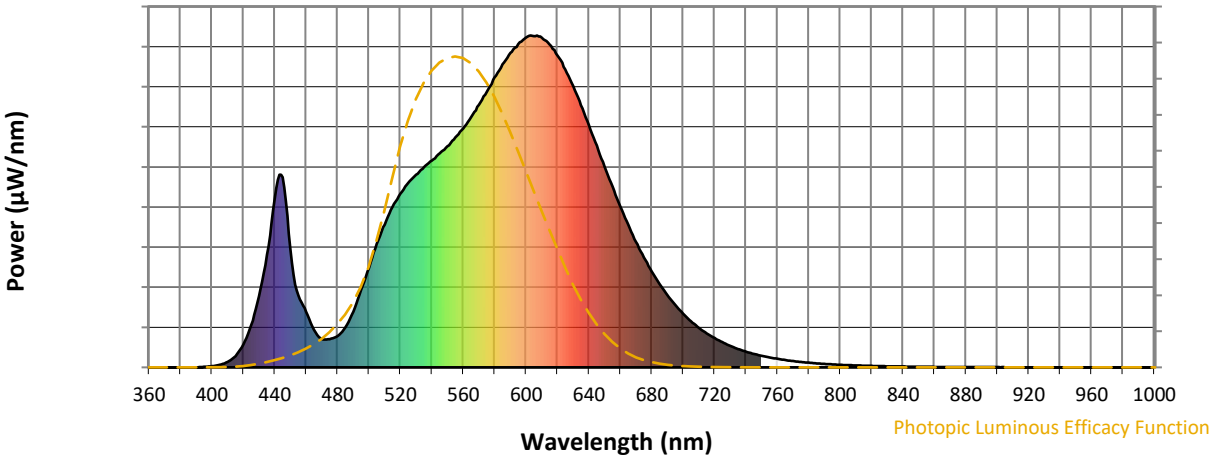


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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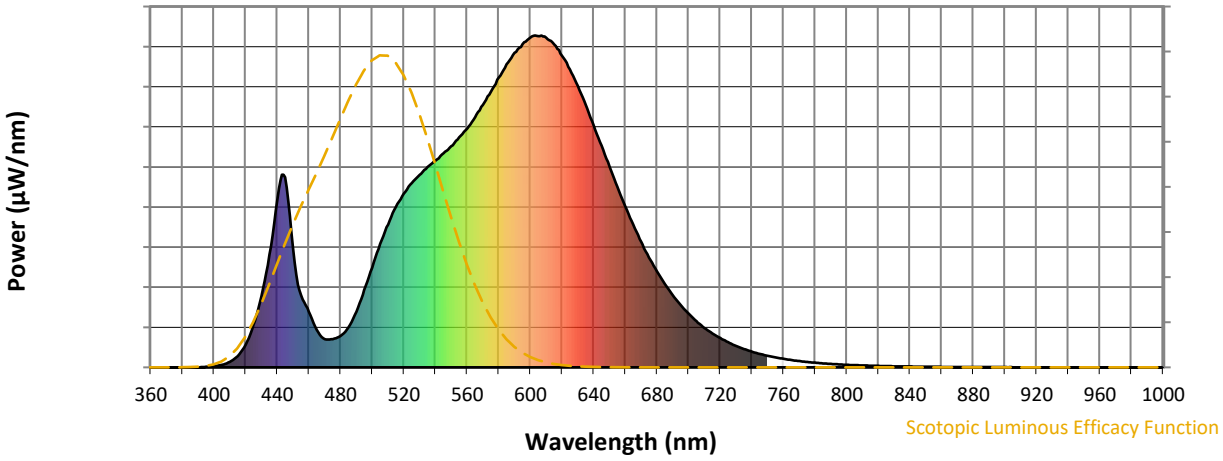
Scotopic Flux vs. Wavelength



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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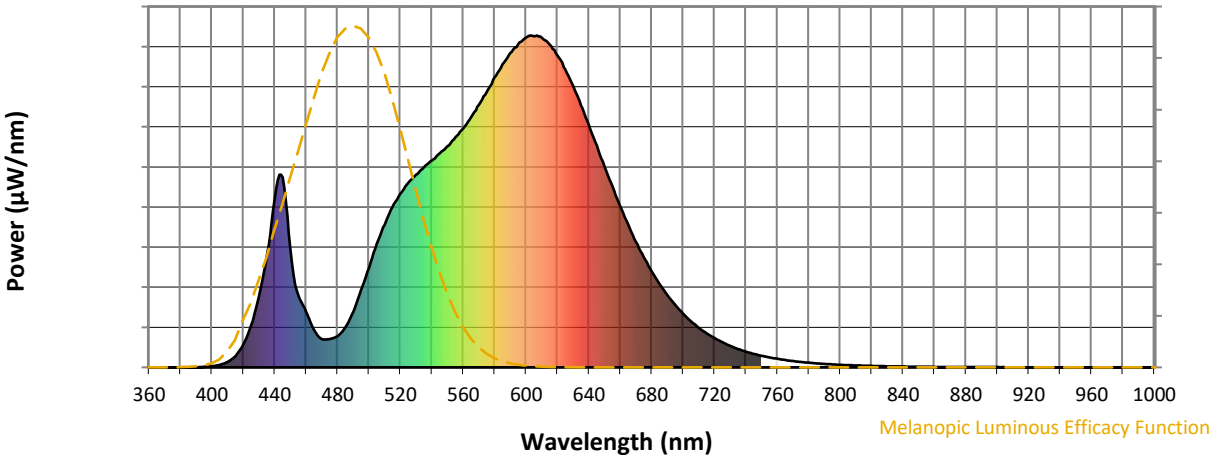
Melanopic Flux vs. Wavelength



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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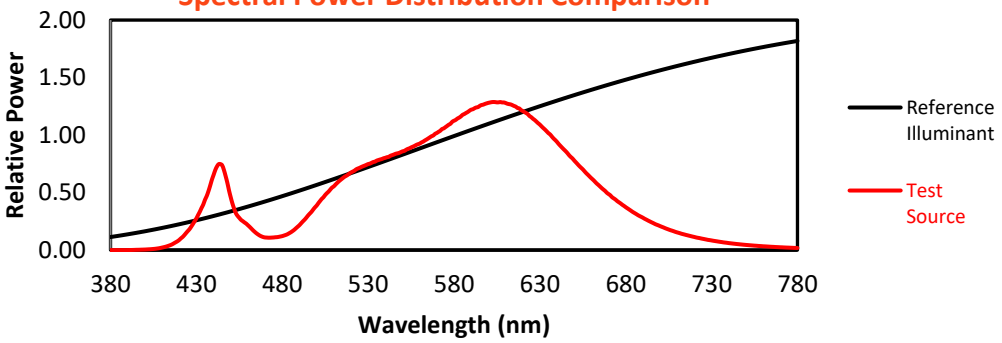
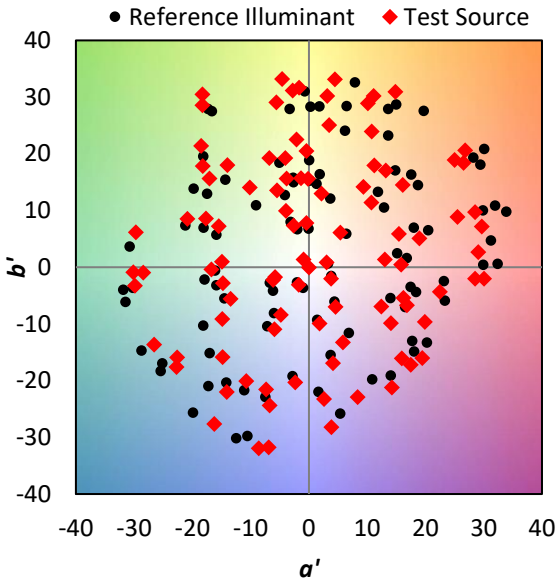
Summary

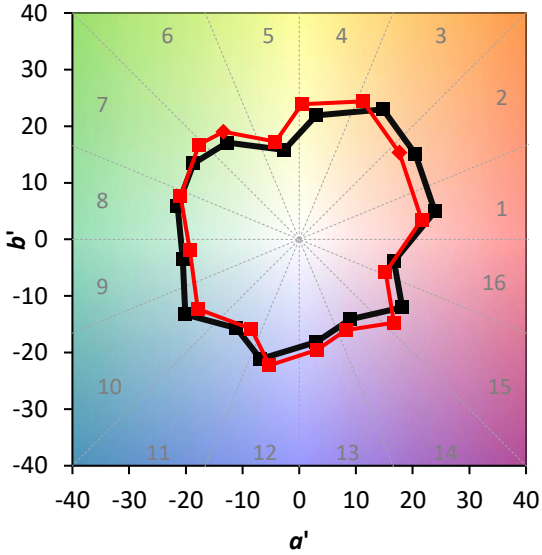
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

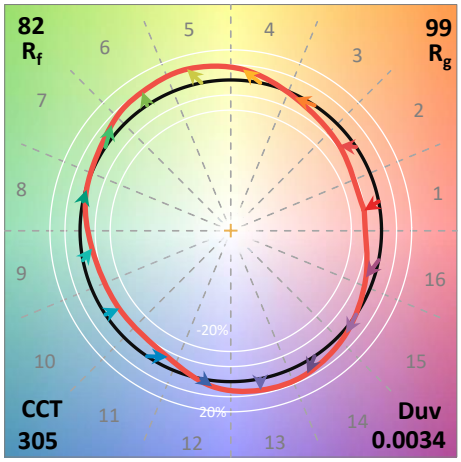
Spectral Power Distribution Comparison

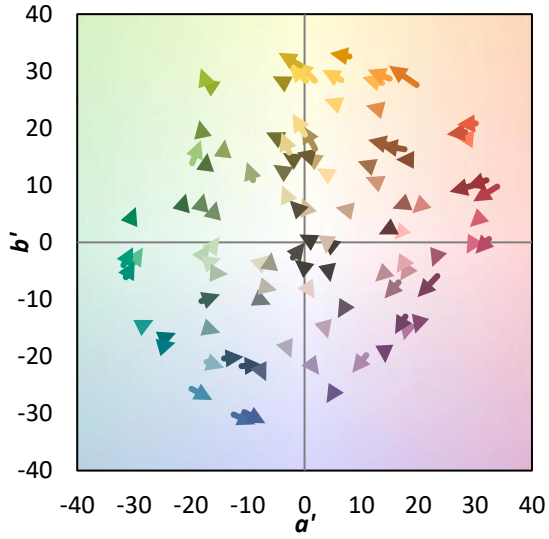


Color Vector Graphics









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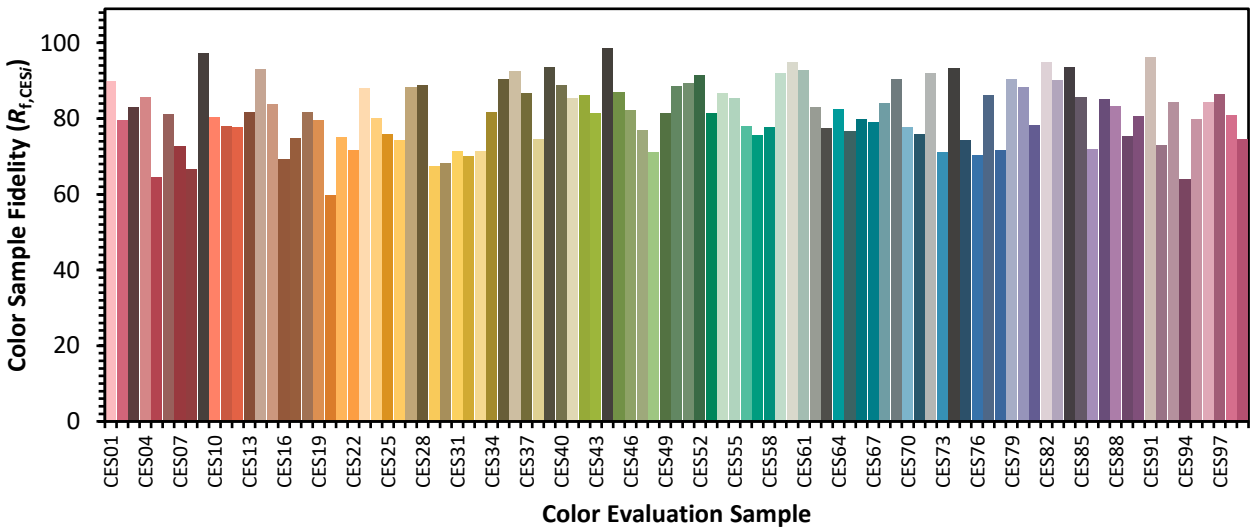
Individual Sample Fidelity Index ($R_{f,i}$)

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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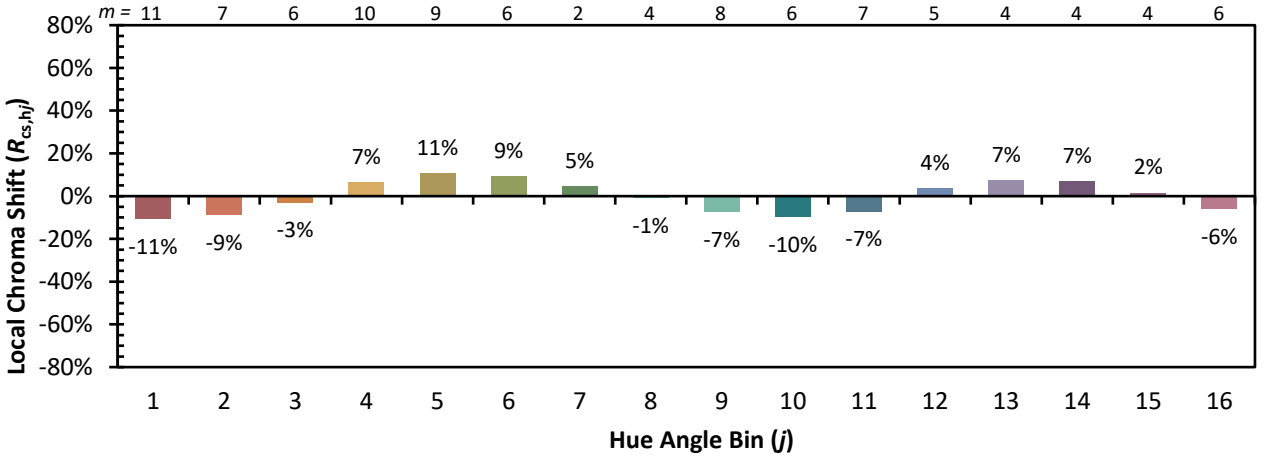
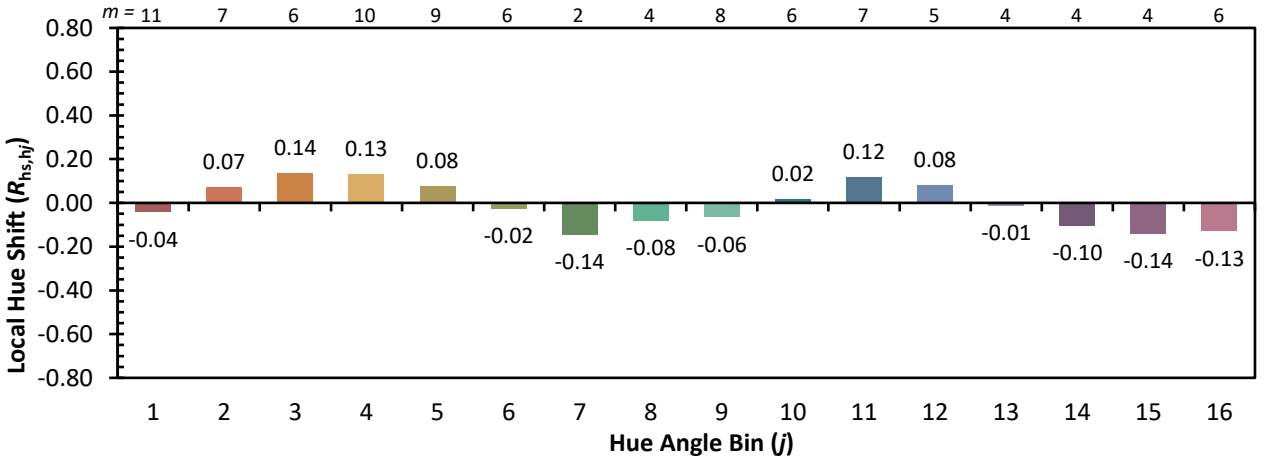
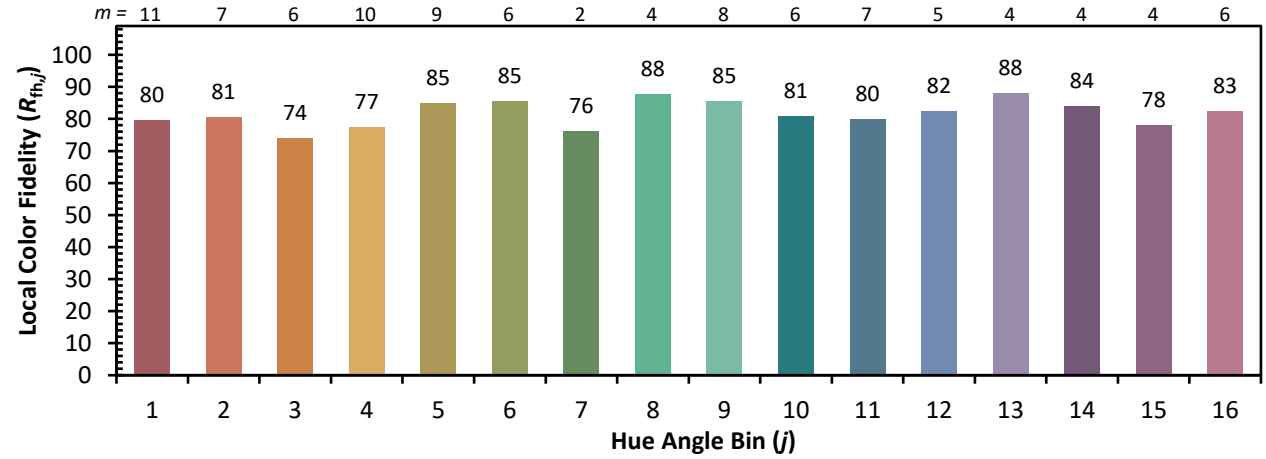
Color Rendition by Hue-Angle Bin







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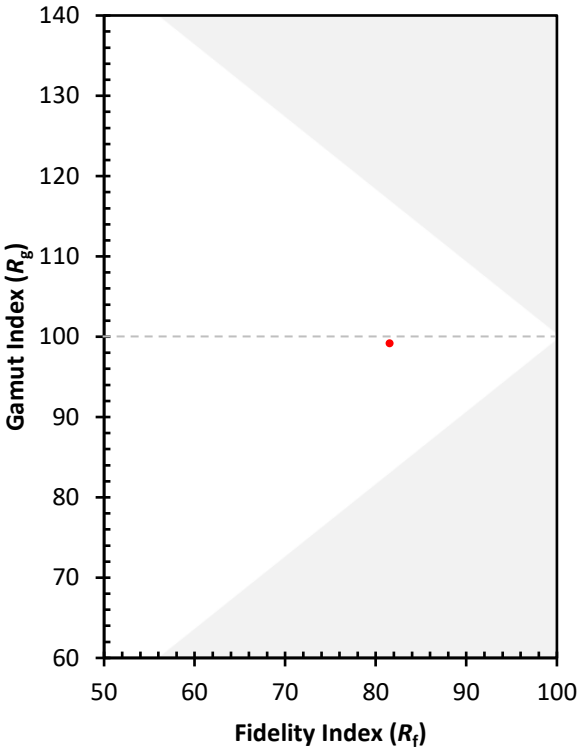
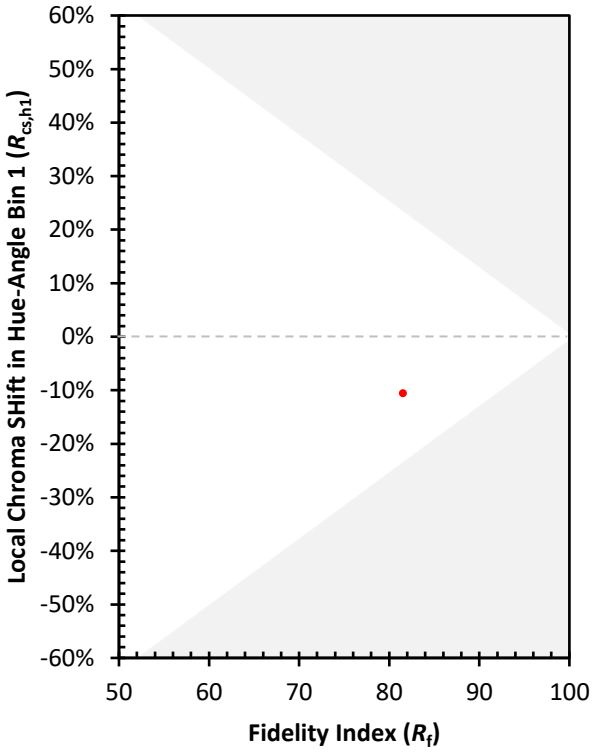
Measure Comparisons





(END OF REPORT)