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: P631559

Luminaire Tested: GWS-SA1F-830-U-T2-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:	P631559
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-21)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1F-830-U-T2-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSLLED GLARE SHIELD, WH
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5579.8 lumens
Efficiency:	N/A
Efficacy:	83.0 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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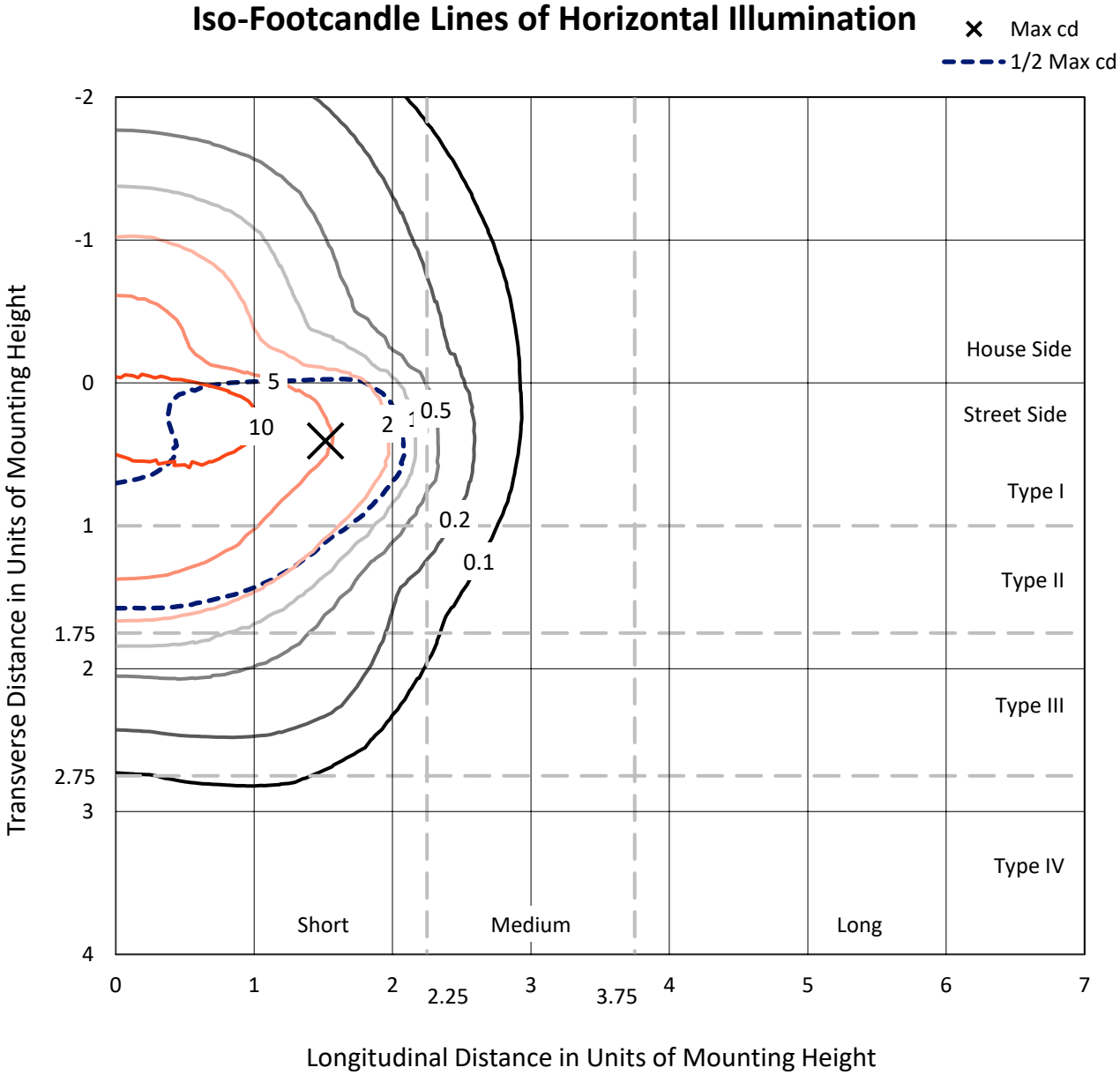
Scaled Data Report

REPORT NUMBER: P631559
CATALOG NUMBER: GWS-SA1F-830-U-T2-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 14.8 fc
Type II - Short - N/A

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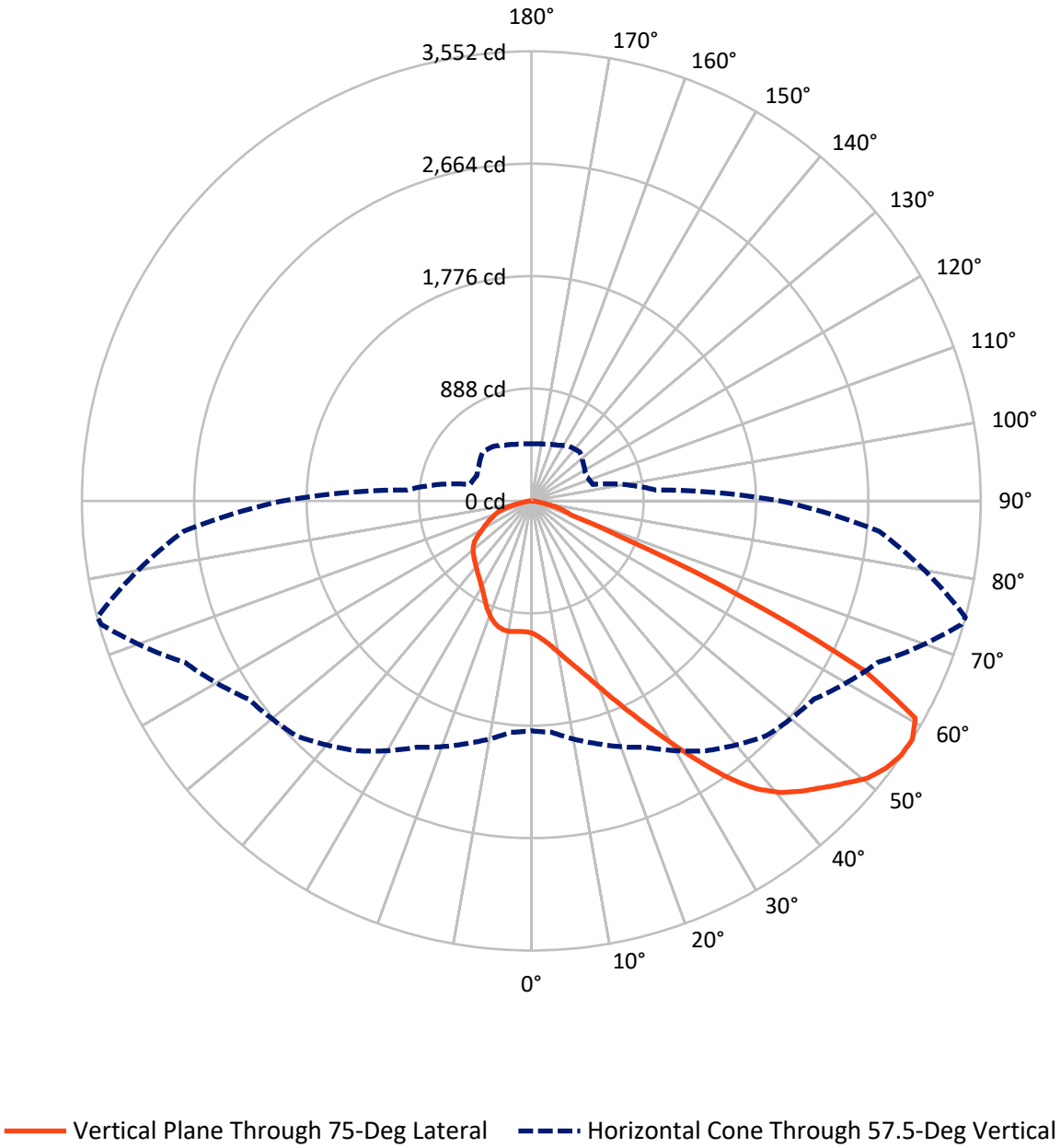
Luminous Intensity Polar Plot



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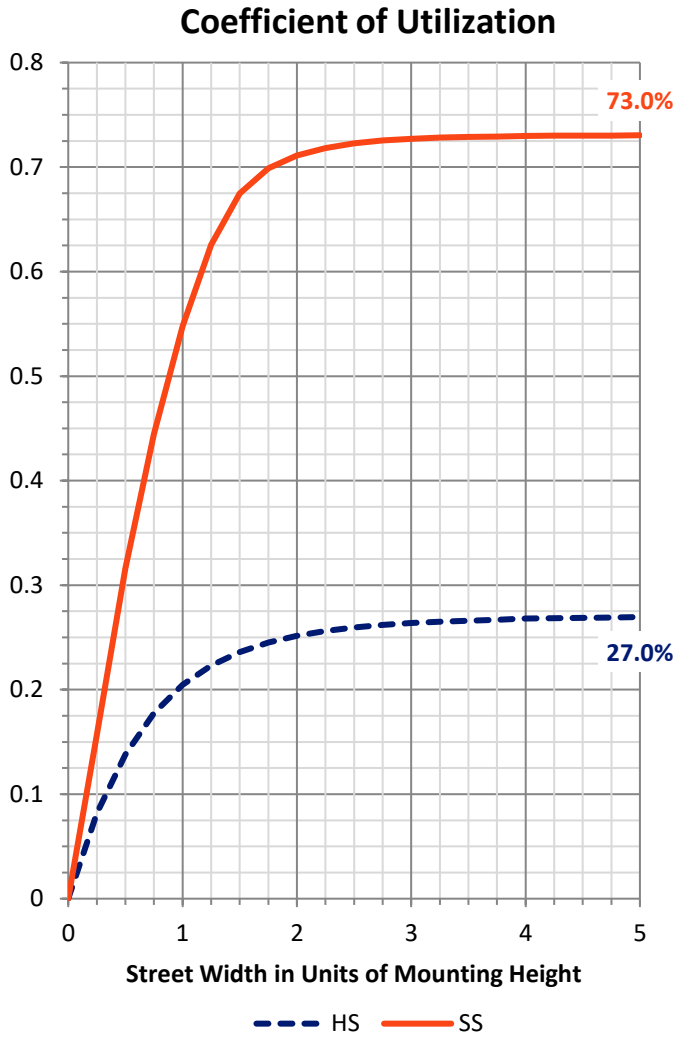
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1509.4	0.0	1509.4
	% Fixture	27.1	0.0	27.1
Street Side	Lumens	4070.4	0.0	4070.4
	% Fixture	72.9	0.0	72.9
Total	Lumens	5579.8	0.0	5579.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.6	1.9
10°-20°	332.9	6.0
20°-30°	590.4	10.6
30°-40°	903.9	16.2
40°-50°	1258.5	22.6
50°-60°	1442.0	25.8
60°-70°	740.9	13.3
70°-80°	186.5	3.3
80°-90°	19.9	0.4
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°	5579.8	100.0
0°-180°	5579.8	100.0



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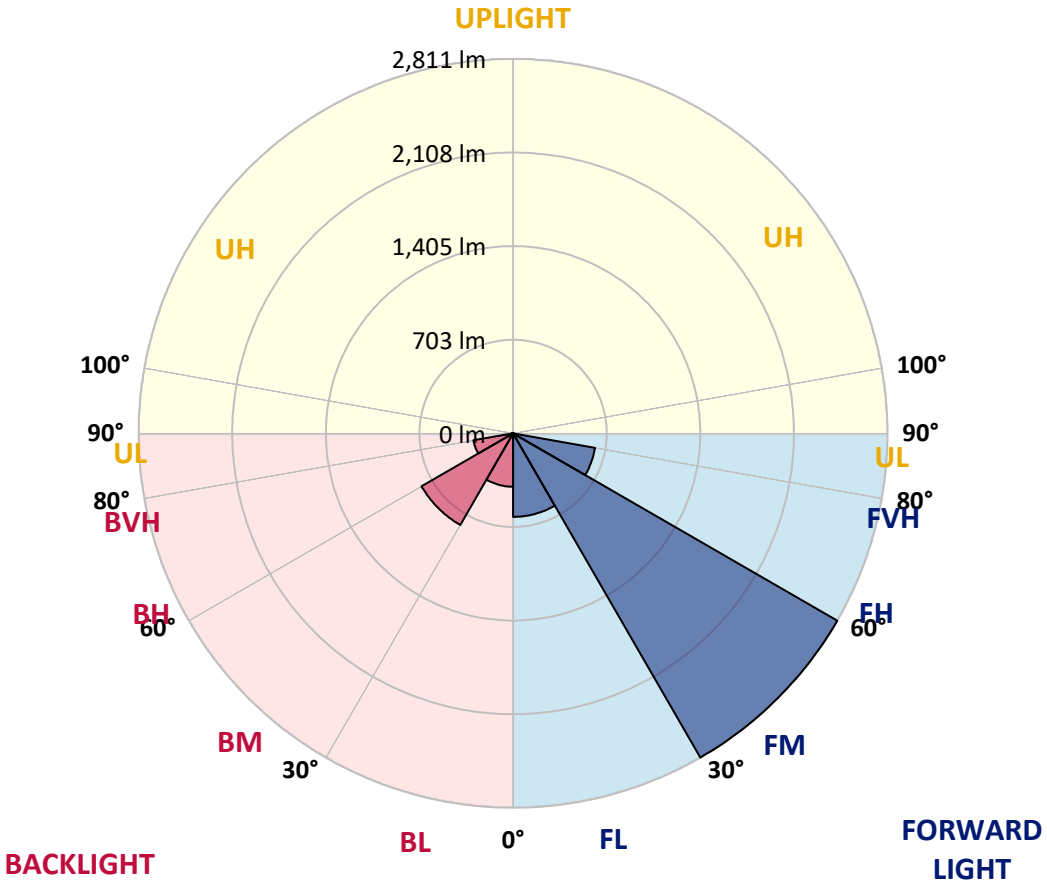
REPORT NUMBER: P631559
CATALOG NUMBER: GWS-SA1F-830-U-T2-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	626.9	11.2			
FM	(30°-60°)	2810.6	50.4			
FH	(60°-80°)	625.4	11.2			G0/660
FVH	(80°-90°)	7.4	0.1			G0/10
BL	(0°-30°)	401.0	7.2	B1/500		
BM	(30°-60°)	793.8	14.2	B1/1000		
BH	(60°-80°)	302.0	5.4	B1/500		G1/500
BVH	(80°-90°)	12.6	0.2			G1/100
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: P631559
CATALOG NUMBER: GWS-SA1F-830-U-T2-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1045.0	1045.0	1045.0	1045.0	1045.0	1045.0	1045.0	1045.0	1045.0	*1045.0*	1045.0
2.5°	1122.7	1125.6	1122.7	1127.5	1117.9	1113.6	1103.0	1087.2	1074.7	*1072.8*	1058.9
5°	1210.0	1216.2	1212.4	1210.5	1197.5	1187.9	1172.1	1140.4	1114.5	*1110.7*	1083.3
7.5°	1266.1	1270.5	1270.5	1271.9	1267.1	1256.1	1239.3	1201.9	1165.4	*1159.6*	1118.4
10°	1284.9	1288.2	1294.4	1306.4	1316.0	1319.4	1308.4	1272.4	1227.8	*1222.0*	1164.4
12.5°	1289.2	1293.0	1302.6	1324.7	1351.1	1375.1	1377.0	1350.6	1300.7	*1294.4*	1217.7
15°	1297.3	1301.2	1314.1	1341.5	1380.3	1426.4	1454.7	1436.5	1381.3	*1374.6*	1278.1
17.5°	1296.4	1300.7	1319.9	1356.3	1408.6	1475.3	1530.0	1537.7	1480.6	*1469.1*	1346.7
20°	1294.0	1297.8	1318.4	1363.1	1427.8	1519.5	1618.3	1658.1	1596.7	*1586.2*	1426.9
22.5°	1313.2	1317.5	1333.3	1370.3	1437.9	1553.5	1699.9	1795.8	1734.4	*1719.5*	1519.0
25°	1356.3	1362.6	1372.2	1397.6	1456.1	1583.8	1783.3	1951.7	1888.9	*1871.1*	1619.3
27.5°	1423.0	1430.7	1444.1	1456.1	1496.9	1622.1	1866.3	2126.4	2063.5	*2044.8*	1725.3
30°	1504.6	1514.7	1531.9	1540.1	1567.9	1678.8	1956.5	2306.3	2269.8	*2243.9*	1844.8
32.5°	1617.3	1631.3	1647.6	1650.0	1666.8	1764.6	2045.8	2484.8	2484.3	*2466.1*	1980.5
35°	1764.2	1779.0	1782.4	1785.7	1793.9	1882.7	2153.7	2647.4	2710.3	*2689.2*	2128.3
37.5°	1924.4	1946.0	1951.3	1936.4	1947.9	2024.7	2275.1	2777.9	2907.0	*2884.4*	2271.3
40°	2095.7	2104.3	2118.7	2095.2	2109.6	2187.3	2394.1	2861.4	3053.8	*3029.8*	2384.0
42.5°	2218.5	2234.3	2255.9	2247.3	2255.4	2326.5	2477.6	2901.7	3158.4	*3134.4*	2465.1
45°	2351.9	2356.7	2370.6	2368.7	2373.5	2439.7	2537.6	2919.5	3252.0	*3230.4*	2534.2
47.5°	2468.0	2475.2	2484.3	2473.7	2463.2	2506.4	2586.5	2934.8	3359.9	*3334.0*	2606.6
50°	2579.8	2586.0	2597.1	2566.3	2527.0	2538.0	2610.5	2955.9	3461.1	*3442.9*	2663.7
52.5°	2600.4	2607.1	2658.9	2665.2	2614.8	2575.9	2652.7	3002.5	3520.6	*3509.1*	2684.4
55°	2340.9	2352.8	2456.0	2574.5	2698.8	2686.3	2720.4	3026.9	3544.1	*3547.0*	2721.3
57.5°	*1816.9*	*1834.2*	*1984.9*	*2147.5*	*2409.0*	*2625.4*	*2729.0*	*3020.7*	*3536.0*	*3551.8*	*2759.2*
60°	1191.8	1201.9	1380.3	1562.6	1833.7	2133.1	2442.6	2908.4	3463.5	*3486.1*	2749.6
62.5°	719.7	731.2	874.6	1012.8	1172.6	1372.7	1656.7	2337.5	2903.2	*2953.5*	2202.2
65°	502.3	517.7	643.4	757.1	812.3	771.0	839.1	1305.5	1808.8	*1829.9*	1345.8
67.5°	364.2	374.7	477.9	613.2	674.1	544.6	415.0	578.1	787.8	*795.5*	555.1
70°	238.5	250.4	344.0	466.8	550.3	441.4	310.4	312.8	331.5	*335.4*	322.4
72.5°	131.0	138.2	212.5	309.9	325.3	263.9	242.3	260.0	273.0	*273.0*	276.4
75°	67.6	73.9	86.8	102.2	123.3	144.4	174.6	201.0	214.9	*215.9*	214.5
77.5°	34.5	36.9	46.5	50.4	55.2	64.3	83.5	107.0	119.5	*124.3*	123.3
80°	16.3	17.3	19.7	23.0	28.3	36.0	45.1	53.7	61.4	*62.4*	67.6
82.5°	8.6	9.6	10.6	12.5	15.4	19.2	26.4	31.7	36.5	*37.4*	41.7
85°	3.4	3.8	4.3	4.8	6.7	8.2	11.0	14.9	18.2	*18.2*	21.6
87.5°	0.0	0.0	0.0	0.0	0.5	1.0	1.9	2.4	3.4	*3.4*	5.8
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: P631559
CATALOG NUMBER: GWS-SA1F-830-U-T2-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1045.0	1045.0	1045.0	1045.0	1045.0	1045.0	1045.0	1045.0	1045.0	1045.0	1045.0
2.5°	1055.5	1041.6	1035.4	1025.3	1017.1	1008.0	1000.8	995.5	992.2	990.3	988.3
5°	1072.8	1051.7	1034.9	1014.7	1000.8	987.4	976.4	968.7	964.8	962.0	960.0
7.5°	1099.7	1071.4	1039.7	1008.5	984.0	962.4	948.5	940.4	935.1	933.2	931.7
10°	1136.6	1097.3	1045.0	995.5	959.1	935.6	926.0	922.1	922.6	921.7	921.2
12.5°	1178.3	1124.6	1043.5	972.5	932.2	918.3	918.8	925.0	932.2	934.1	934.6
15°	1223.4	1151.5	1029.6	942.8	911.1	912.5	925.0	939.9	953.3	958.6	959.6
17.5°	1272.4	1174.0	1004.2	910.1	893.8	909.2	932.2	956.7	976.4	985.0	987.4
20°	1327.1	1193.2	968.2	878.0	877.5	902.9	936.5	968.7	993.6	1005.1	1007.1
22.5°	1385.1	1205.2	924.1	848.3	860.7	894.8	933.2	966.8	993.1	1004.7	1007.1
25°	1443.7	1209.0	875.6	820.9	843.5	881.8	916.9	943.7	968.7	978.8	980.7
27.5°	1498.4	1198.0	829.5	797.4	827.6	862.6	886.2	900.5	917.8	925.5	926.9
30°	1554.0	1175.9	790.7	778.7	809.9	836.3	846.8	847.8	854.5	854.5	855.4
32.5°	1610.1	1143.3	756.6	760.5	787.8	805.1	806.5	795.5	787.3	773.9	773.4
35°	1674.9	1110.2	728.8	739.8	761.9	772.4	768.1	747.0	727.3	705.3	704.3
37.5°	1734.9	1076.1	705.3	718.7	732.6	740.3	730.2	704.8	688.5	665.9	662.6
40°	1784.3	1045.4	682.7	696.6	703.4	710.1	693.8	673.1	675.5	663.1	662.6
42.5°	1813.1	1015.7	661.6	672.2	676.5	681.3	666.9	651.5	664.5	654.9	655.4
45°	1834.2	989.8	642.4	646.3	656.8	664.0	650.6	633.3	636.2	599.2	590.6
47.5°	1858.2	975.4	624.2	620.4	639.1	651.5	630.9	606.0	588.7	552.2	548.9
50°	1883.6	970.1	605.0	594.4	617.0	629.0	605.0	573.8	551.3	531.6	529.7
52.5°	1892.3	969.6	581.0	563.3	585.8	602.6	582.5	550.8	523.9	504.7	503.8
55°	1926.3	983.6	550.3	520.6	541.7	576.2	561.3	515.8	494.2	485.5	484.6
57.5°	*1966.1*	*985.9*	*501.9*	*474.0*	*503.3*	*544.1*	*525.4*	*486.0*	*462.5*	*452.0*	*451.0*
60°	1949.8	926.9	450.0	438.5	470.7	513.8	496.6	462.5	435.2	425.1	424.1
62.5°	1485.9	654.4	412.1	407.8	435.6	470.2	466.8	431.3	405.4	398.2	397.3
65°	893.8	459.6	375.7	375.2	394.9	428.0	432.3	403.5	376.1	366.1	366.1
67.5°	441.9	351.7	334.4	332.0	344.5	368.0	386.2	362.7	339.7	330.1	328.6
70°	312.3	309.9	304.2	297.5	299.9	309.5	317.1	297.5	273.0	263.4	261.5
72.5°	270.1	270.6	266.8	261.5	259.6	252.8	246.1	231.7	216.9	206.8	207.7
75°	209.7	210.6	213.0	211.1	205.8	198.6	191.4	173.2	161.2	151.6	149.7
77.5°	122.3	127.1	134.8	132.9	133.9	123.8	120.9	103.2	92.1	85.4	84.0
80°	69.1	72.0	75.3	77.7	74.8	70.5	64.3	54.7	51.3	46.5	45.6
82.5°	41.7	44.6	46.1	48.0	47.0	41.3	36.5	30.2	27.3	24.9	24.5
85°	21.1	23.0	24.5	25.4	22.5	18.7	16.8	13.4	11.5	10.1	10.1
87.5°	5.3	5.8	6.7	5.8	5.3	2.4	1.9	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

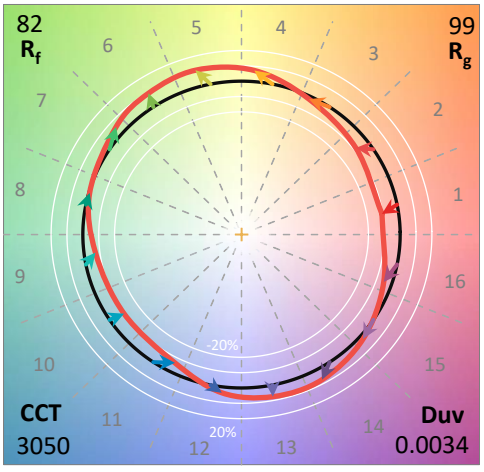
Test Information

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

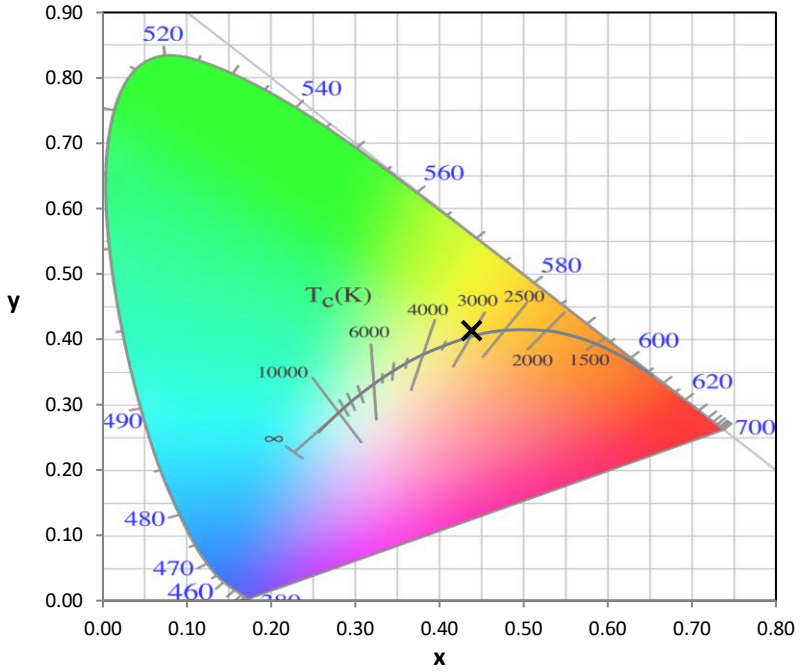
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

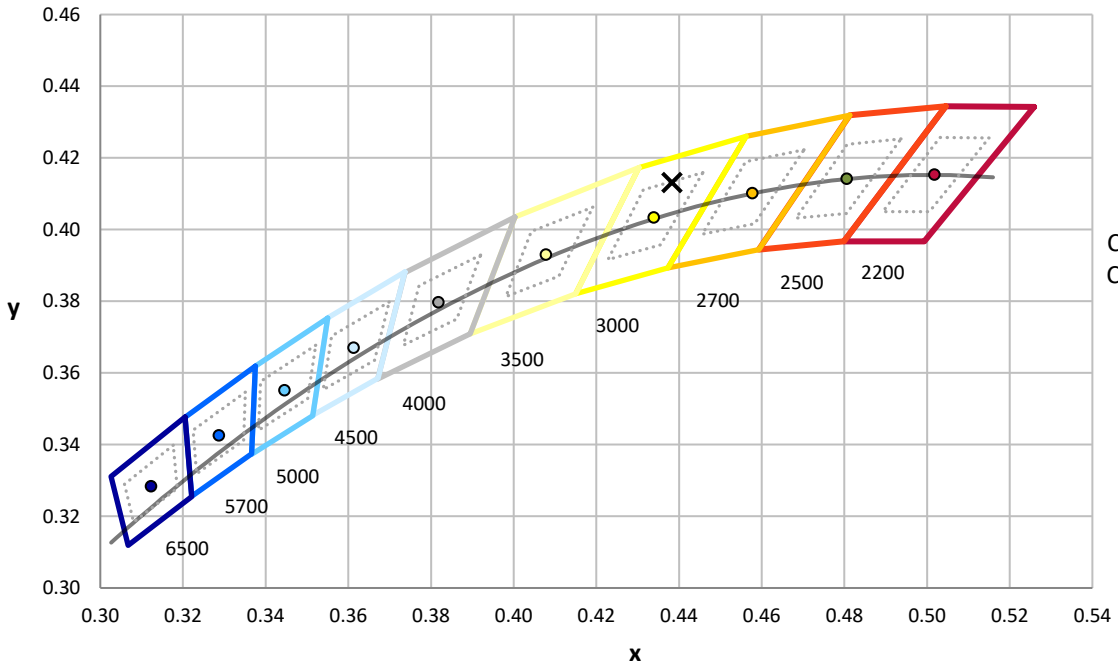
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

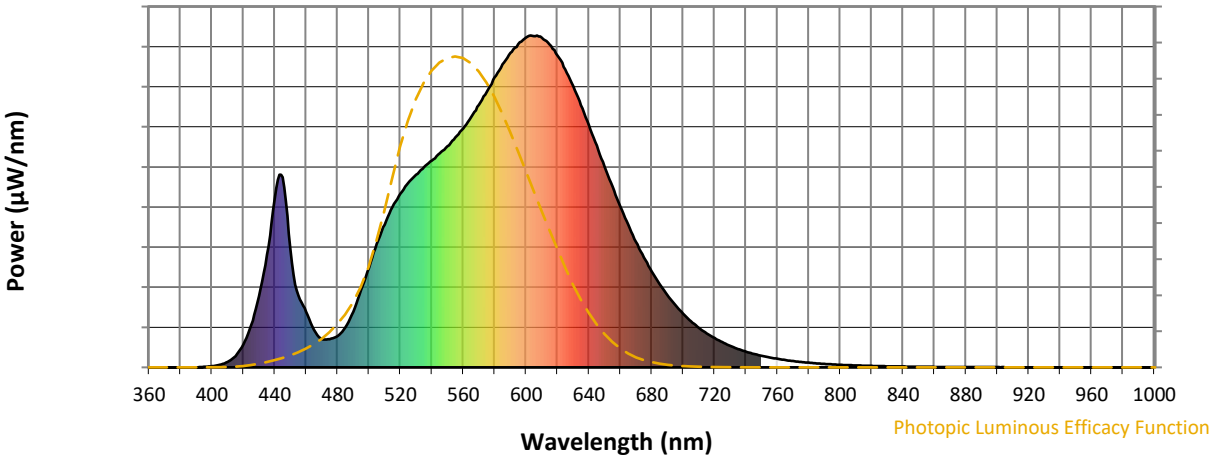


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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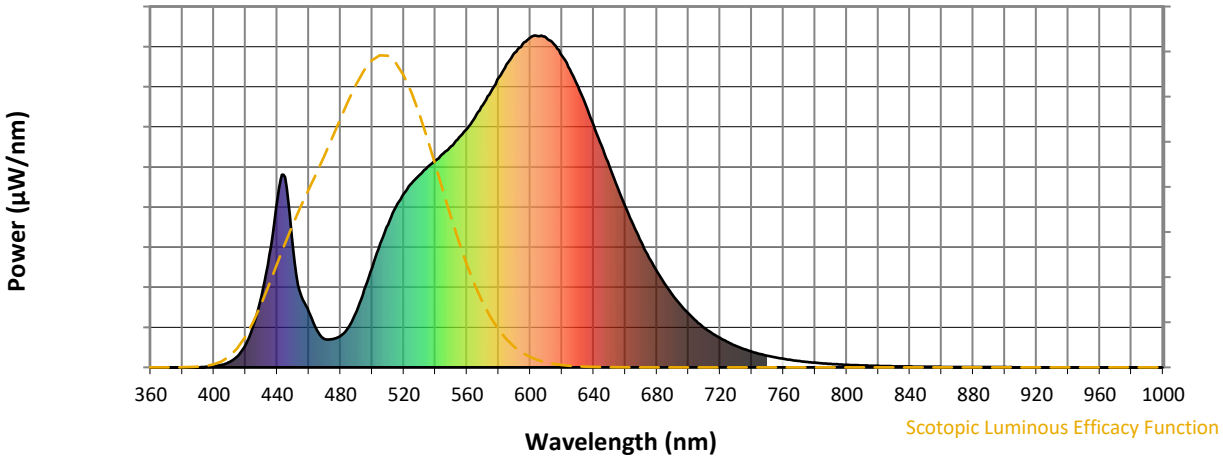
Scotopic Flux vs. Wavelength



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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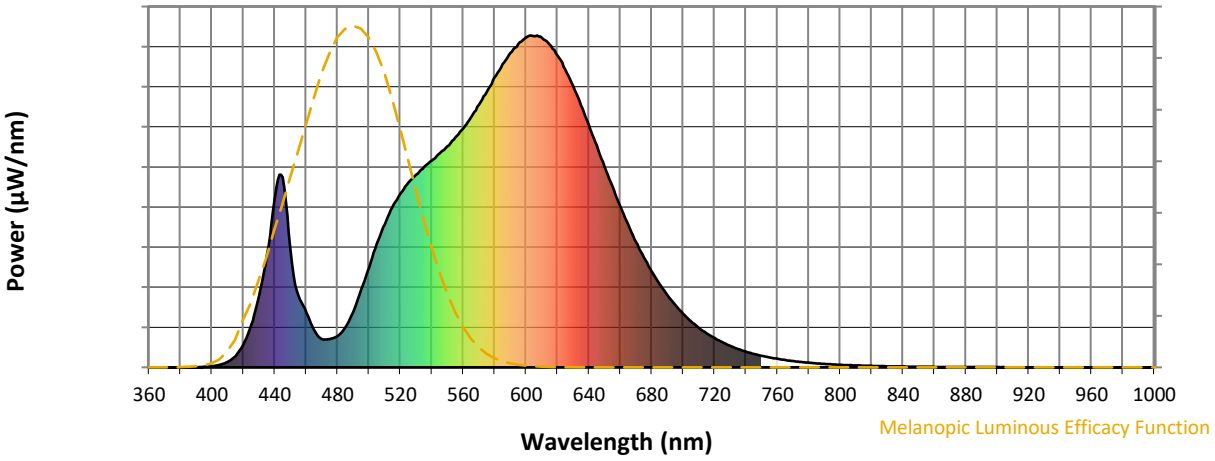
Melanopic Flux vs. Wavelength



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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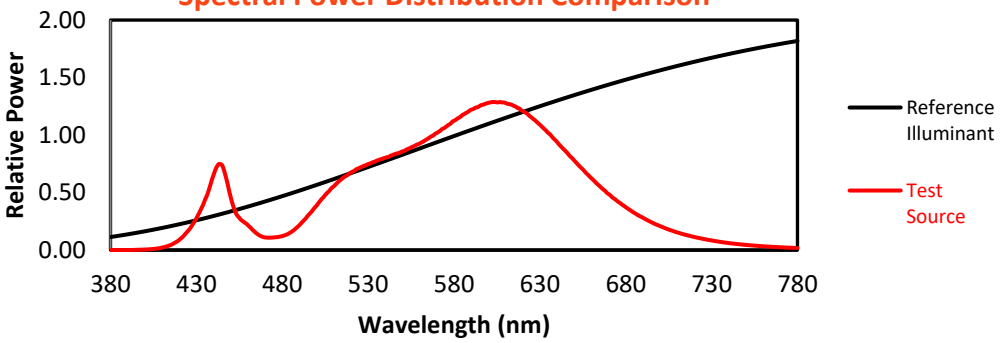
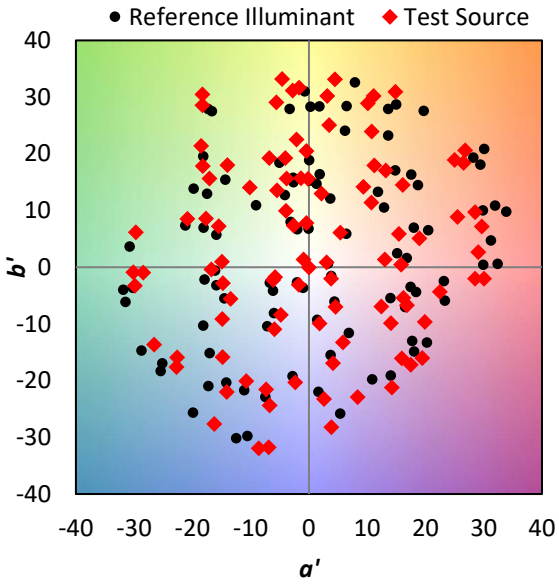
Summary

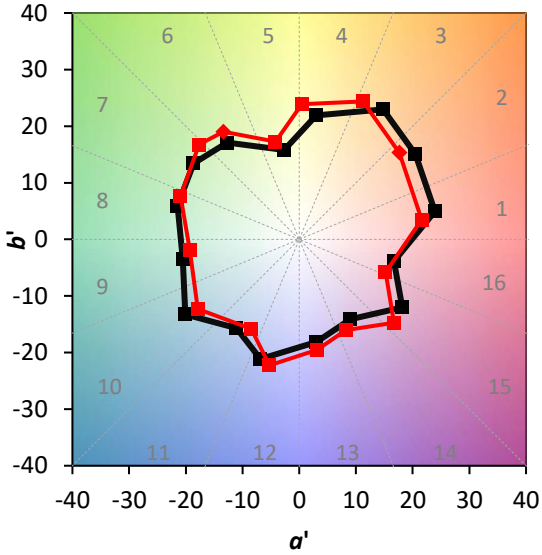
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

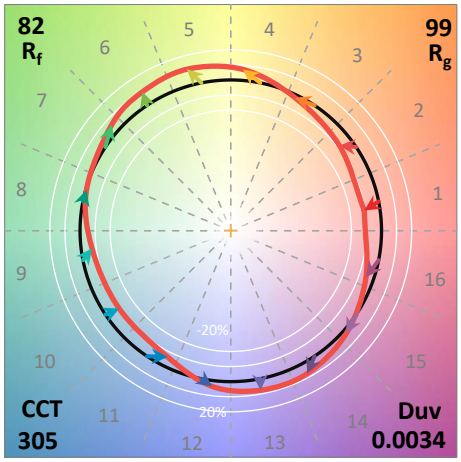
Spectral Power Distribution Comparison

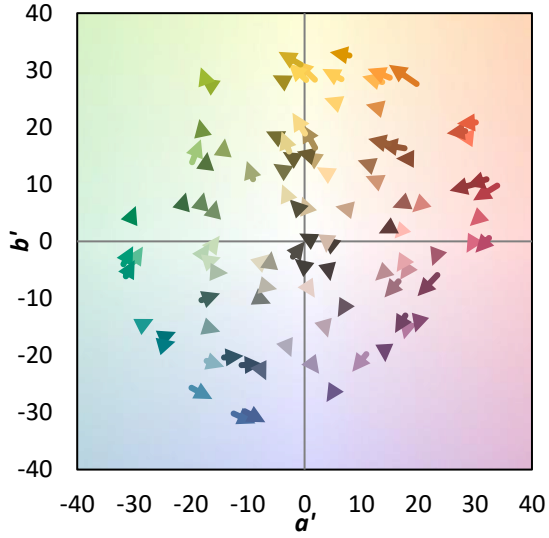


Color Vector Graphics









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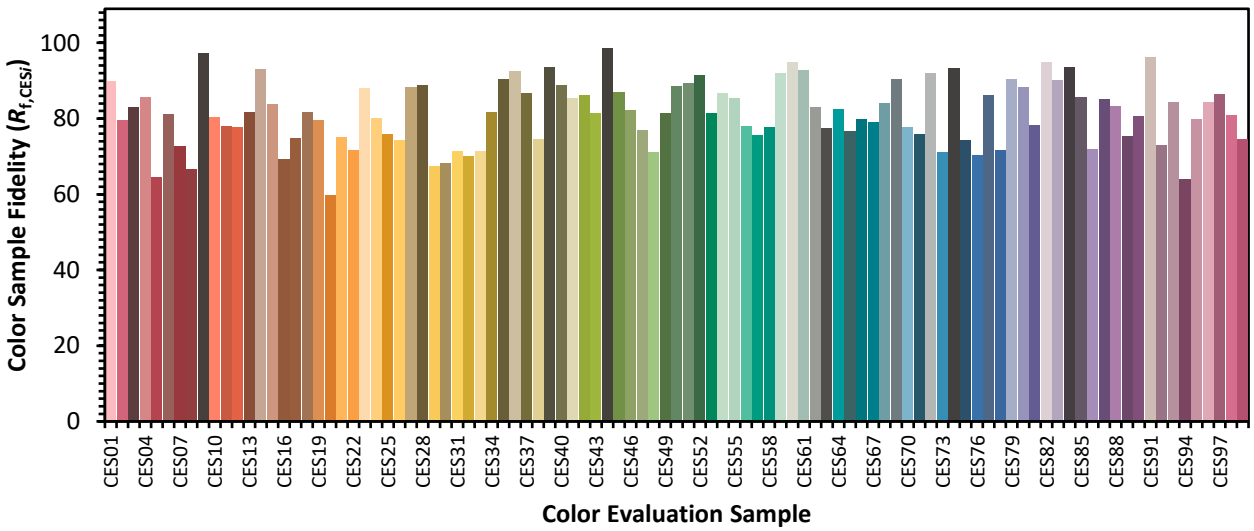
Individual Sample Fidelity Index ($R_{f,i}$)

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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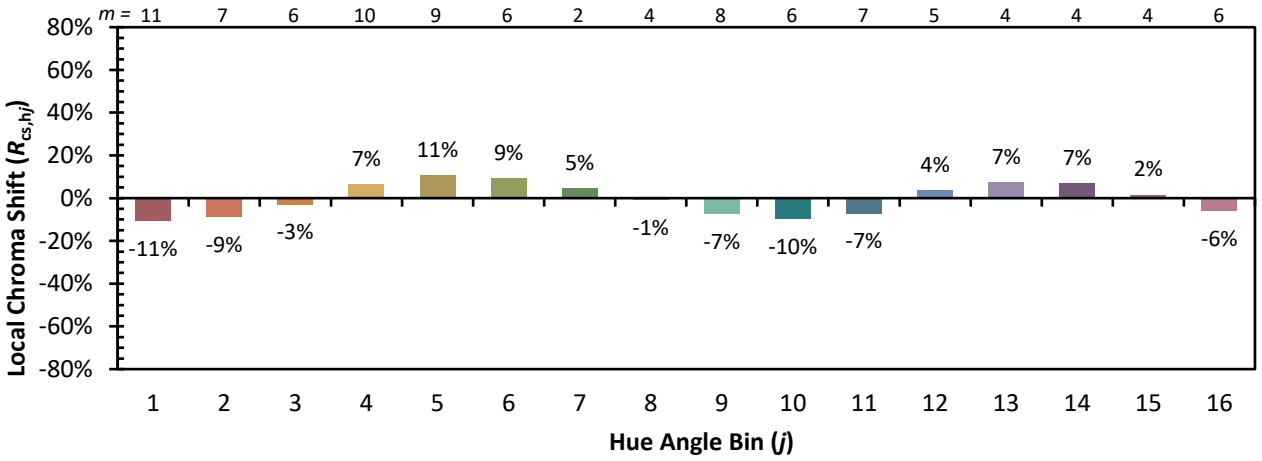
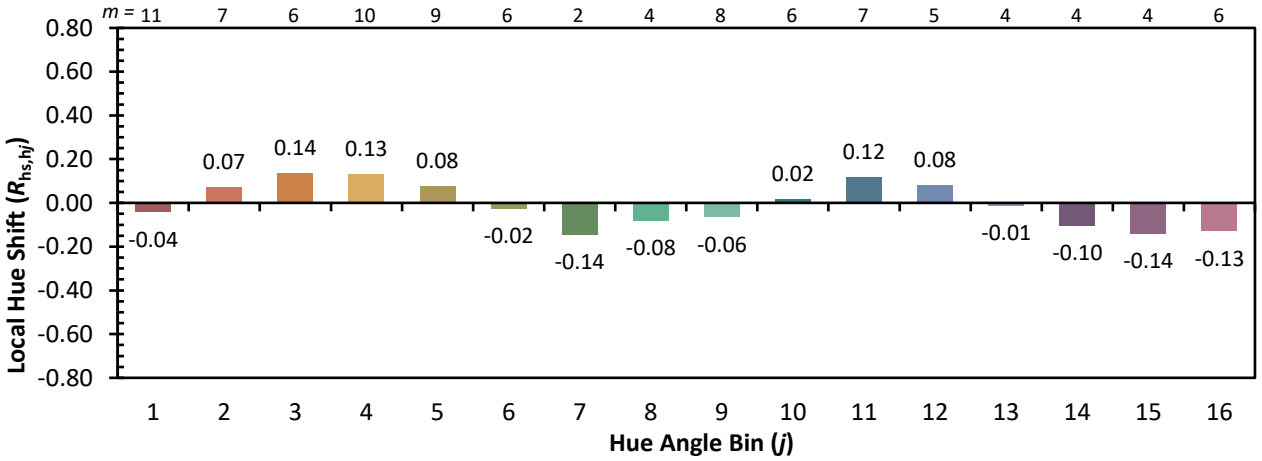
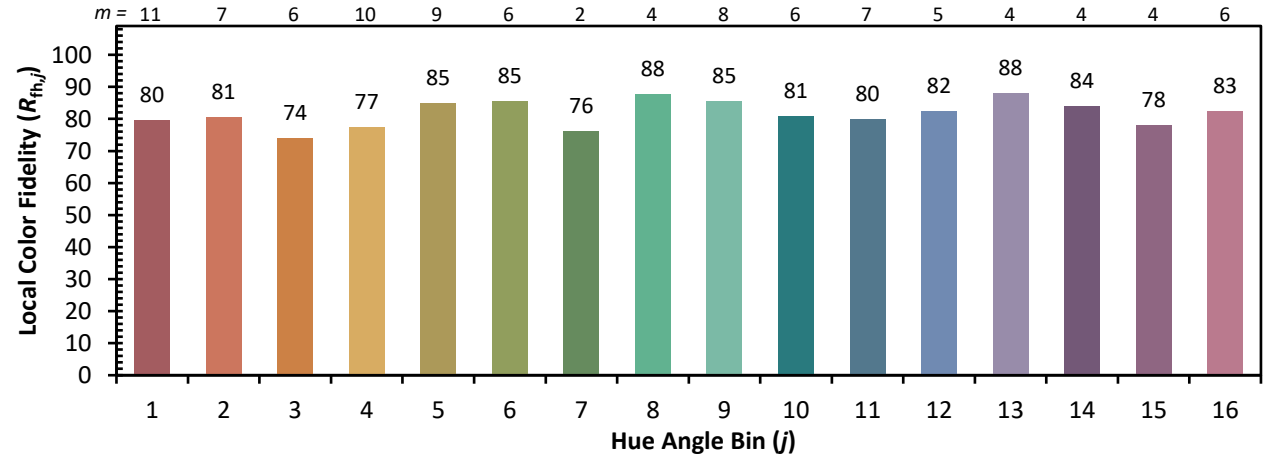
Color Rendition by Hue-Angle Bin







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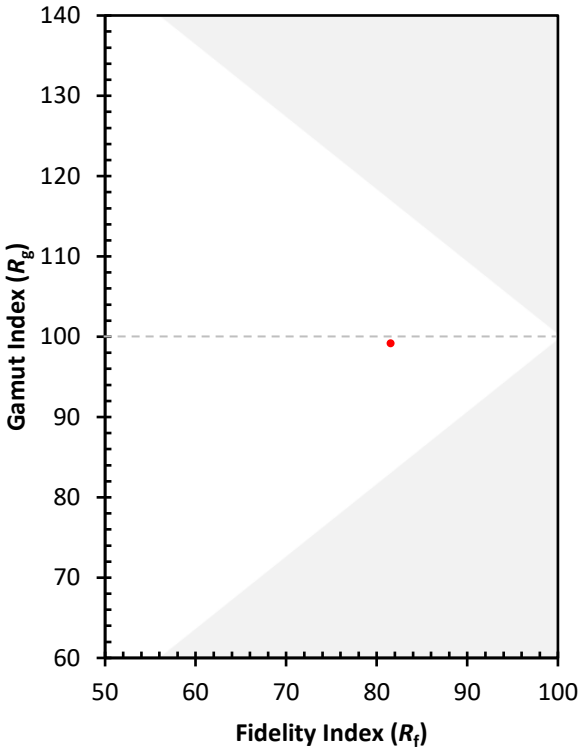
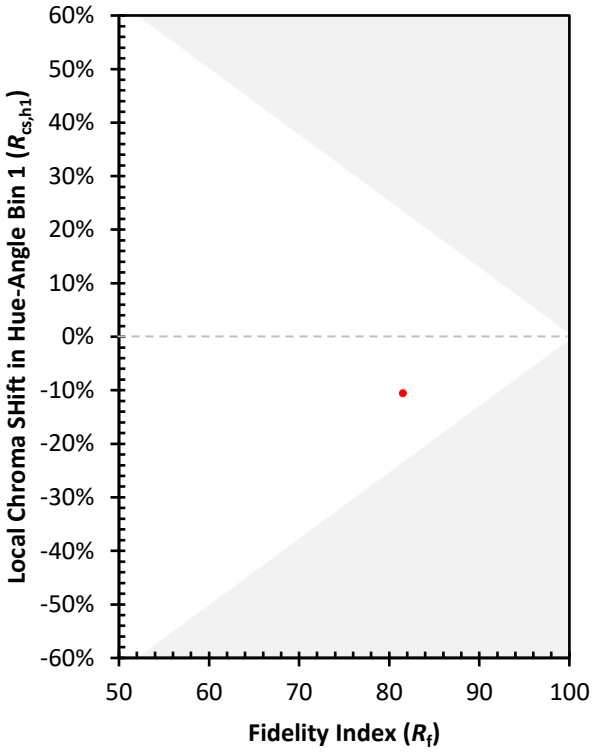
Measure Comparisons





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