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: P631044

Luminaire Tested: GWS-SA1E-830-U-SL2-W-GRSBK

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:	P631044
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-28)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1E-830-U-SL2-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	3534.6 lumens
Efficiency:	N/A
Efficacy:	60.5 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G0

Input Watts (W):	58.4
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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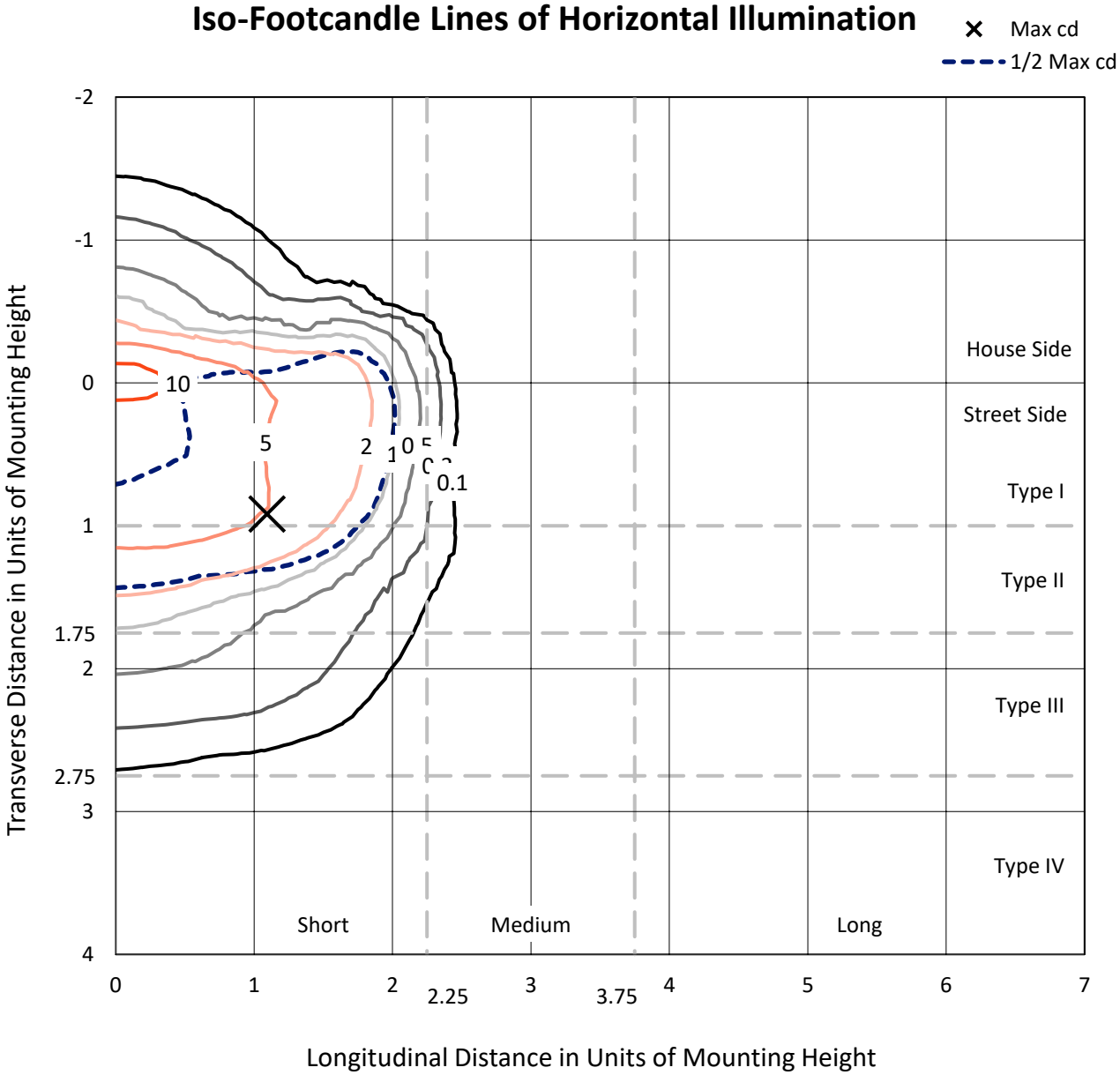
REPORT NUMBER: P631044
CATALOG NUMBER: GWS-SA1E-830-U-SL2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 12.4 fc
Type II - Short - N/A

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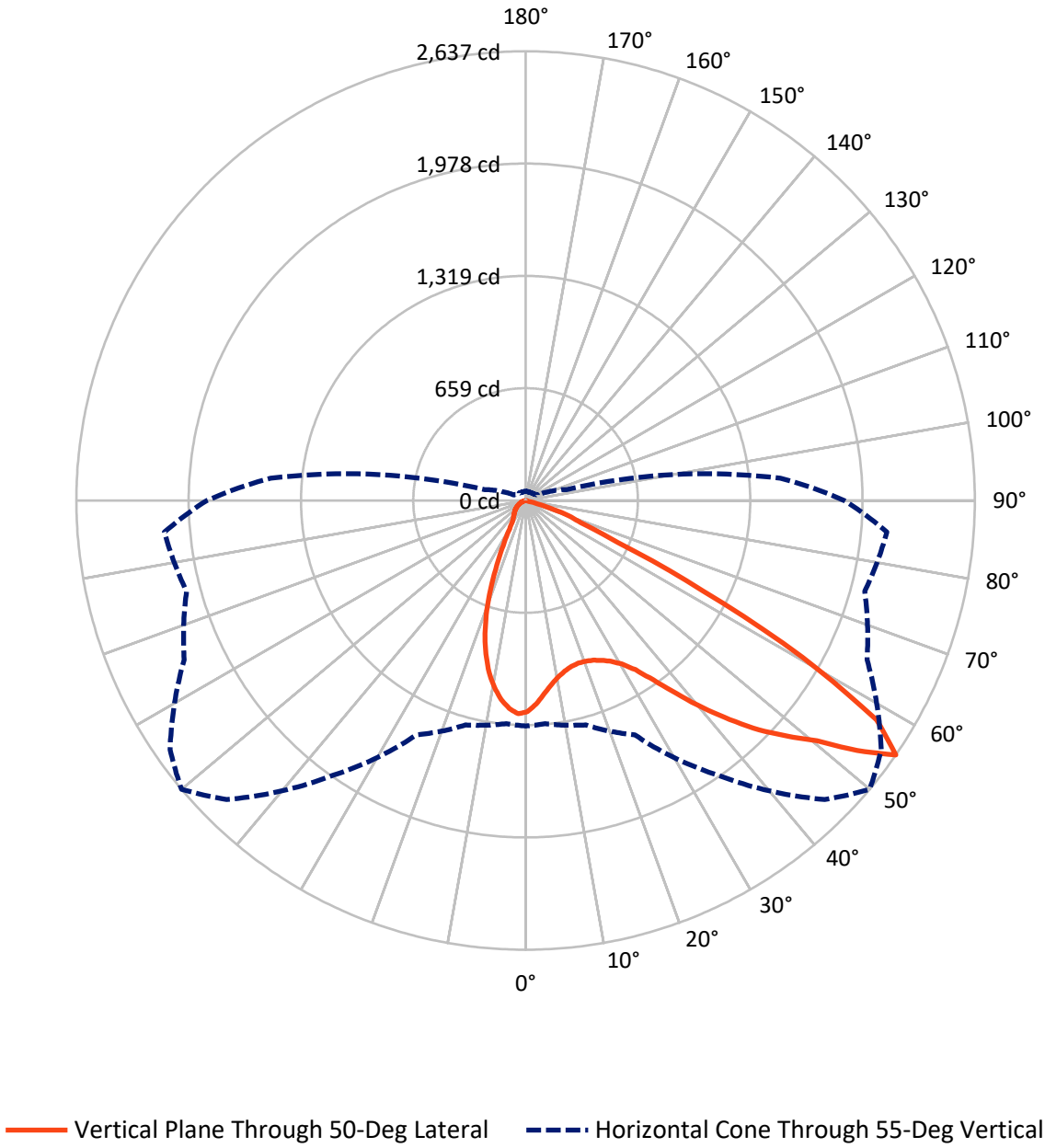
Luminous Intensity Polar Plot



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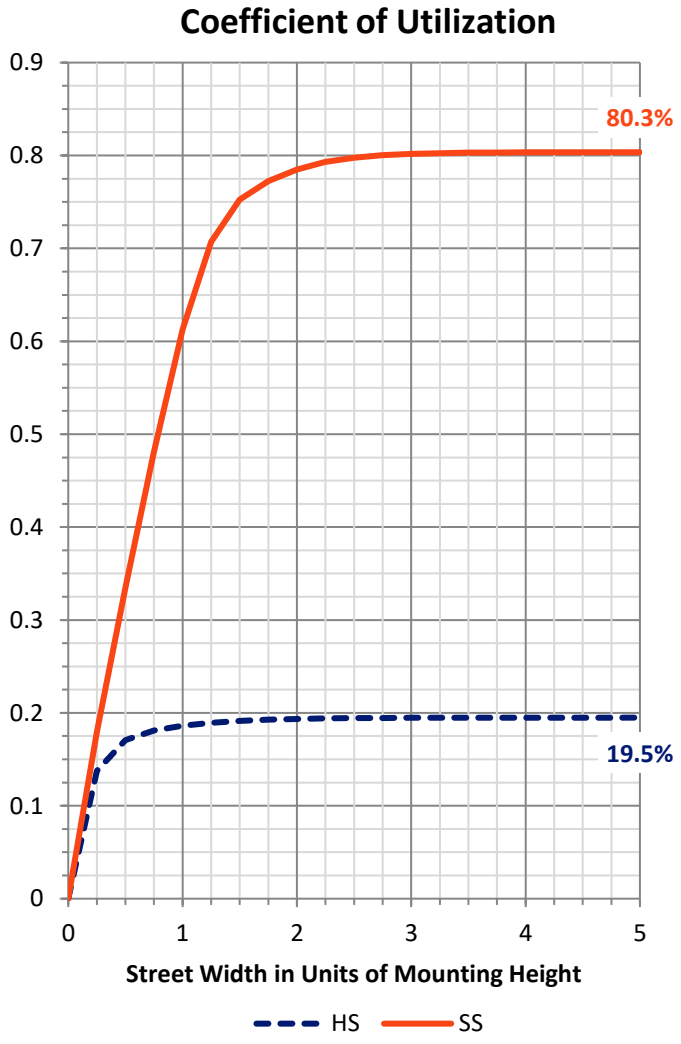
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	696.5	0.0	696.5
	% Fixture	19.7	0.0	19.7
Street Side	Lumens	2838.1	0.0	2838.1
	% Fixture	80.3	0.0	80.3
Total	Lumens	3534.6	0.0	3534.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	3.1
10°-20°	268.0	7.6
20°-30°	378.0	10.7
30°-40°	559.4	15.8
40°-50°	807.1	22.8
50°-60°	952.0	26.9
60°-70°	424.7	12.0
70°-80°	36.5	1.0
80°-90°	0.0	0.0
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°	3534.6	100.0
0°-180°	3534.6	100.0



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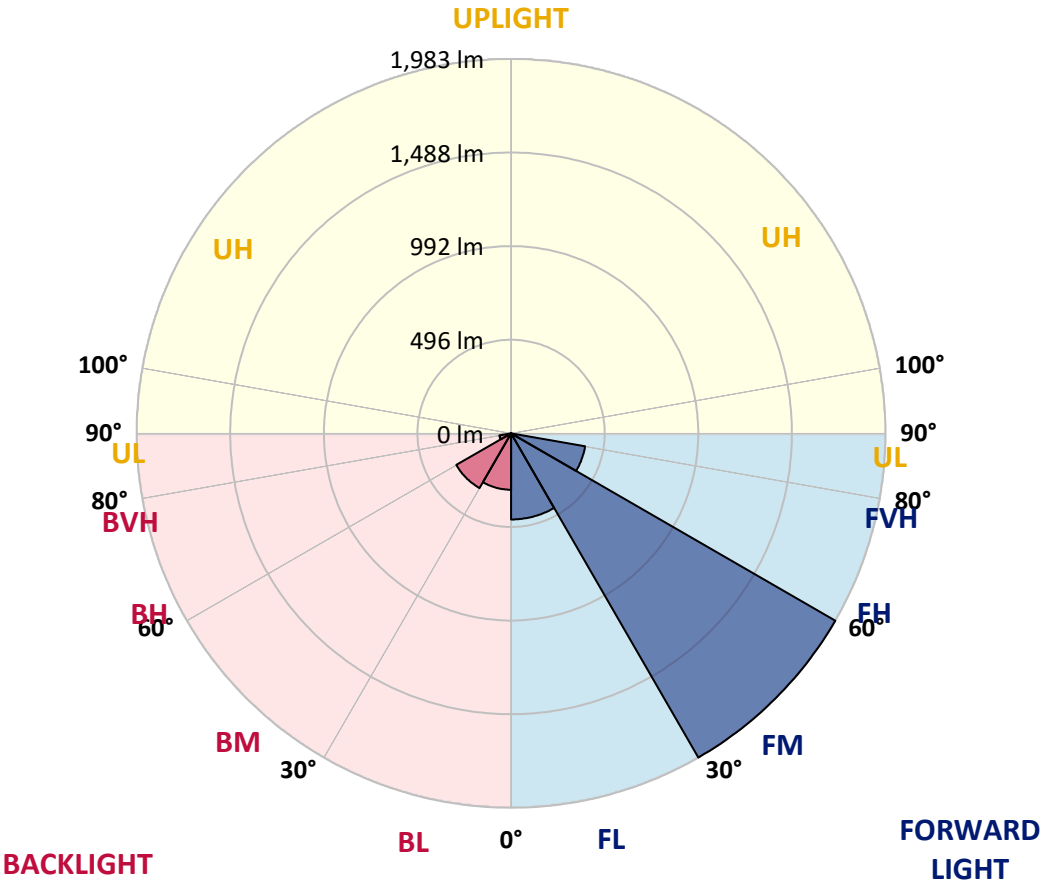
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	456.3	12.9			
FM	(30°-60°)	1983.5	56.1			
FH	(60°-80°)	398.3	11.3			G0/660
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	298.6	8.4	B1/500		
BM	(30°-60°)	335.0	9.5	B1/1000		
BH	(60°-80°)	62.9	1.8	B0/110		G0/110
BVH	(80°-90°)	0.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G0
Type II Short



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REPORT NUMBER: P631044
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	*1240.1*	1240.1	1240.1	1240.1	1240.1
2.5°	1152.1	1153.0	1153.4	1165.1	1169.4	1186.6	*1195.7*	1200.4	1212.9	1227.6	1239.7
5°	1074.9	1073.6	1075.7	1090.4	1099.9	1125.4	*1139.2*	1148.7	1176.3	1210.8	1239.7
7.5°	1007.6	1010.1	1012.7	1028.7	1042.9	1070.6	*1090.4*	1104.6	1143.0	1194.4	1243.2
10°	960.1	960.1	964.0	982.1	998.9	1033.0	*1052.9*	1071.0	1116.7	1179.7	1247.0
12.5°	925.1	925.6	930.3	951.0	970.4	1005.8	*1026.5*	1044.2	1094.7	1165.1	1247.9
15°	908.7	907.4	911.3	933.3	954.9	988.1	*1009.7*	1027.0	1079.2	1156.9	1252.2
17.5°	904.4	903.6	906.6	928.2	950.2	982.5	*1003.7*	1020.9	1077.0	1159.4	1265.2
20°	916.9	915.2	913.9	932.5	953.2	985.1	*1007.1*	1026.5	1087.4	1173.7	1285.0
22.5°	946.7	946.7	943.7	952.8	966.6	995.5	*1018.3*	1043.8	1114.6	1202.2	1314.4
25°	1001.5	997.2	991.6	995.5	993.7	1011.9	*1039.1*	1074.4	1165.9	1249.2	1350.2
27.5°	1064.1	1068.0	1058.5	1058.9	1043.8	1037.3	*1068.8*	1122.3	1242.3	1315.6	1403.2
30°	1149.1	1146.1	1146.5	1145.2	1110.3	1079.6	*1113.7*	1184.9	1338.5	1417.0	1472.3
32.5°	1215.5	1219.9	1234.1	1242.3	1196.6	1147.4	*1183.6*	1269.9	1448.1	1532.7	1556.9
35°	1285.9	1293.6	1322.6	1349.3	1310.9	1254.4	*1293.2*	1382.5	1551.2	1647.0	1653.9
37.5°	1360.1	1375.6	1410.1	1457.2	1451.1	1401.1	*1436.5*	1515.0	1632.4	1716.1	1734.2
40°	1445.1	1460.2	1516.7	1584.5	1598.7	1587.5	*1599.1*	1644.9	1685.9	1719.1	1768.7
42.5°	1538.3	1559.0	1630.6	1721.3	1774.8	1784.7	*1757.5*	1752.8	1709.2	1684.6	1761.4
45°	1648.3	1672.5	1753.6	1871.0	1956.0	1969.4	*1922.3*	1861.5	1723.8	1659.1	1739.4
47.5°	1771.7	1794.6	1875.3	2016.4	2142.8	2148.0	*2066.0*	1968.1	1767.4	1688.5	1756.2
50°	1813.2	1827.4	1897.3	2063.0	2296.0	2335.7	*2217.1*	2088.0	1855.0	1774.8	1838.2
52.5°	1670.8	1676.4	1737.2	1904.6	2264.9	2520.0	*2437.5*	2267.1	2010.8	1906.4	1964.6
55°	*1323.8*	*1314.8*	*1364.0*	*1517.6*	*1968.5*	*2482.4*	*2637.3*	*2548.4*	*2211.4*	*2060.8*	*2129.0*
57.5°	926.0	915.2	904.0	1008.0	1468.8	2104.4	*2430.2*	2587.7	2402.6	2214.0	2306.4
60°	761.2	750.8	696.4	648.5	888.0	1511.1	*1866.7*	2163.1	2387.1	2206.3	2300.8
62.5°	657.6	651.6	629.6	564.4	522.5	862.6	*1168.9*	1452.9	1831.7	1732.5	1737.7
65°	516.5	514.8	529.9	536.8	462.1	477.2	*596.3*	755.1	990.3	933.8	885.4
67.5°	353.0	349.1	377.6	464.3	444.4	376.7	*349.1*	352.1	428.5	261.9	208.0
70°	224.4	215.3	215.8	287.8	361.6	297.3	*269.3*	236.9	213.2	38.8	44.0
72.5°	143.7	138.1	118.7	129.9	167.4	145.0	*146.3*	126.0	84.1	20.7	24.2
75°	60.4	55.7	42.7	34.1	33.7	21.1	*18.6*	17.3	11.7	11.7	12.5
77.5°	0.4	0.0	0.0	0.4	0.9	0.4	*0.4*	0.9	1.7	2.6	3.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	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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CATALOG NUMBER: GWS-SA1E-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1
2.5°	1247.0	1236.7	1248.3	1252.6	1252.2	1252.6	1240.1	1231.5	1231.1	1220.3	1215.1
5°	1251.8	1243.6	1252.2	1246.6	1233.2	1216.4	1194.0	1174.5	1165.9	1153.4	1147.4
7.5°	1260.8	1252.2	1250.9	1228.5	1195.3	1159.9	1120.2	1084.8	1065.8	1042.9	1044.2
10°	1267.3	1257.4	1240.6	1194.8	1139.6	1083.1	1024.0	971.3	938.1	907.4	902.3
12.5°	1269.9	1255.2	1216.0	1146.9	1069.3	995.5	908.7	833.7	781.9	741.8	736.1
15°	1274.7	1250.9	1184.5	1089.1	982.5	878.1	767.6	664.9	596.3	550.2	554.0
17.5°	1282.0	1246.2	1149.1	1024.4	889.3	741.8	592.5	474.7	411.7	384.9	385.3
20°	1292.3	1240.6	1110.3	953.2	777.6	587.7	414.2	325.4	307.7	306.8	305.5
22.5°	1306.2	1235.0	1068.8	875.1	645.1	411.7	275.7	248.1	255.4	269.7	272.3
25°	1322.6	1228.1	1022.7	787.1	500.5	270.1	206.7	202.4	220.1	239.1	243.4
27.5°	1348.0	1224.6	970.0	686.9	351.2	193.7	169.1	171.7	187.7	203.7	207.6
30°	1391.2	1231.1	912.6	574.8	225.7	154.5	146.7	150.6	159.2	167.4	170.9
32.5°	1449.8	1250.1	857.0	452.2	160.9	134.2	132.5	134.6	138.1	142.8	144.1
35°	1518.5	1282.9	799.6	323.6	132.9	122.5	120.8	120.8	122.5	123.4	123.8
37.5°	1575.0	1317.4	745.6	215.3	119.1	113.5	110.9	109.6	109.2	110.0	110.5
40°	1599.6	1331.6	686.9	156.6	109.2	105.3	101.4	97.5	97.5	100.5	101.0
42.5°	1582.3	1315.6	619.2	129.5	102.3	96.7	90.6	87.2	88.9	91.9	92.8
45°	1545.6	1276.4	544.6	114.3	95.4	88.0	81.1	79.0	80.7	84.6	85.4
47.5°	1539.6	1250.5	455.2	104.4	88.0	80.7	73.4	71.2	73.4	76.4	77.2
50°	1599.6	1272.9	356.0	95.8	81.1	72.9	66.9	64.7	66.0	67.7	68.6
52.5°	1709.2	1356.2	287.4	87.6	72.9	65.2	61.3	58.7	58.7	60.4	60.8
55°	*1871.0*	*1501.6*	*248.1*	*78.1*	*63.4*	*59.1*	*55.7*	*53.1*	*53.1*	*53.9*	*54.4*
57.5°	2057.4	1677.7	257.2	65.6	55.7	53.5	50.5	48.3	49.2	49.2	49.2
60°	2031.5	1664.7	275.3	55.2	49.2	48.3	45.7	44.9	47.0	45.3	44.4
62.5°	1496.4	1150.0	144.1	45.3	42.3	41.4	39.7	41.4	44.4	39.7	38.0
65°	726.6	556.6	57.8	37.1	35.8	35.0	34.1	36.7	38.4	31.1	29.3
67.5°	170.9	138.9	37.5	31.5	29.8	28.0	28.9	29.3	28.0	21.1	20.3
70°	44.4	43.6	29.3	26.3	23.7	22.0	22.0	21.6	18.6	13.4	12.5
72.5°	24.2	23.7	21.1	19.8	16.4	14.7	15.1	13.4	10.4	7.8	7.3
75°	12.1	12.9	12.1	11.2	9.1	8.2	8.2	7.3	5.2	3.0	3.0
77.5°	2.6	3.0	3.0	2.6	2.2	1.7	1.7	2.2	0.9	0.0	0.0
80°	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

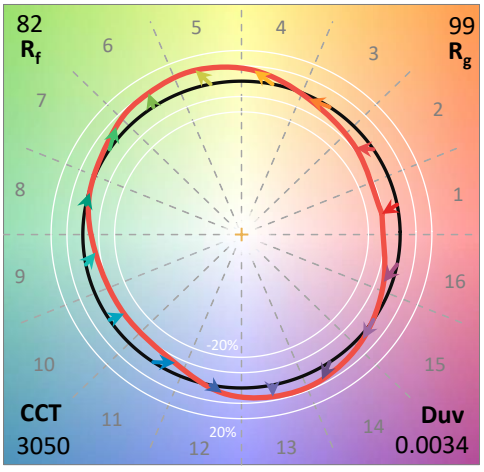
Test Information

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

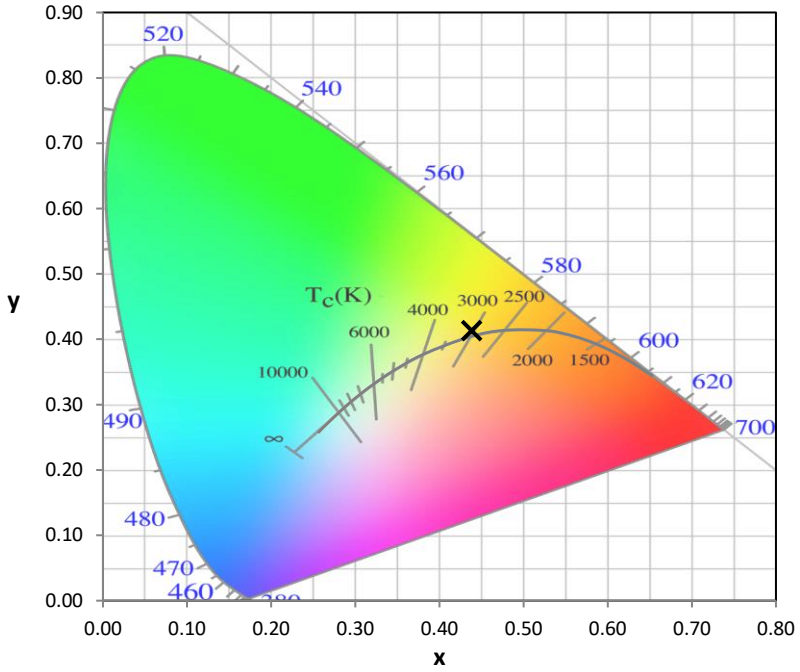
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

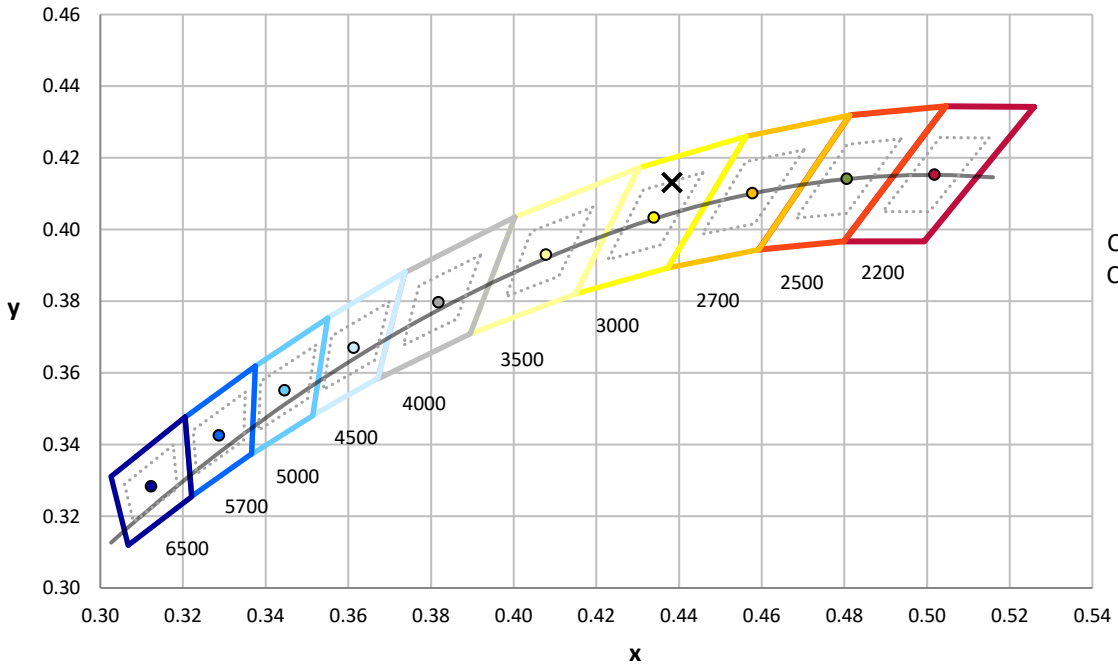
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

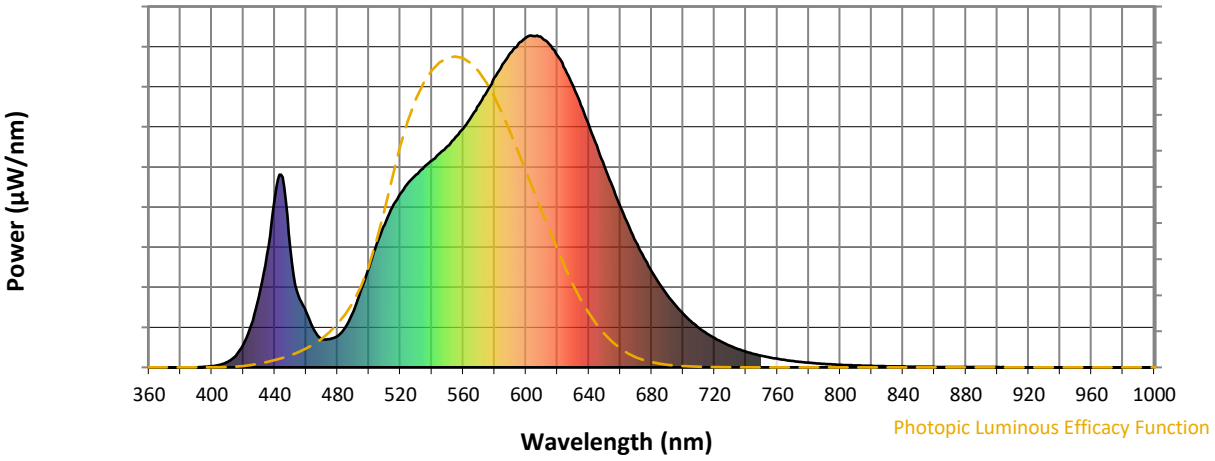


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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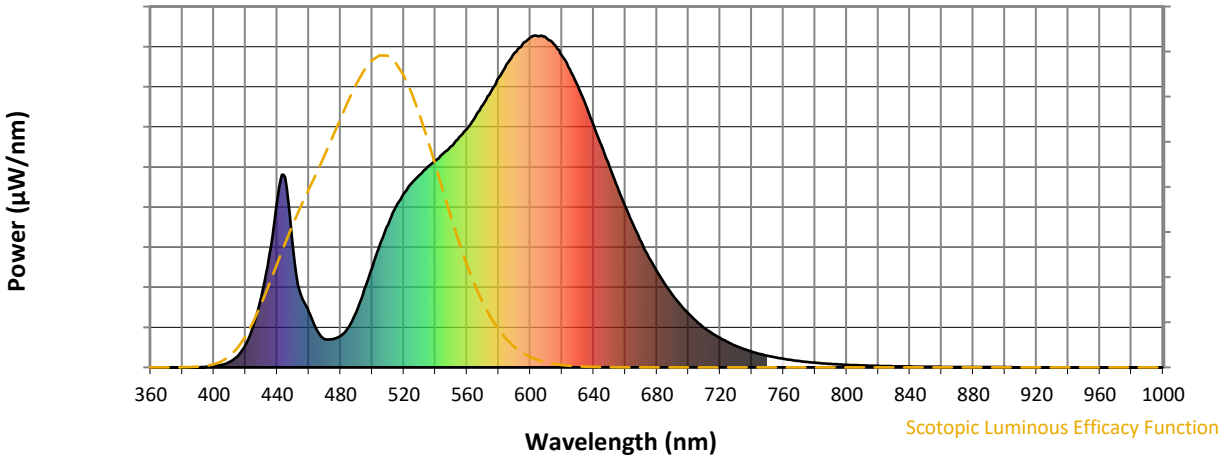
Scotopic Flux vs. Wavelength



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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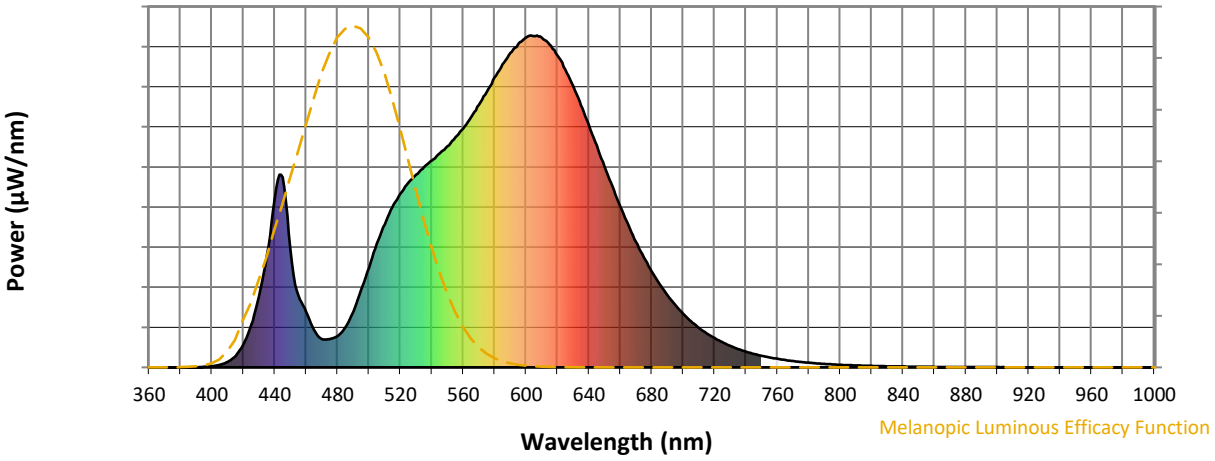
Melanopic Flux vs. Wavelength



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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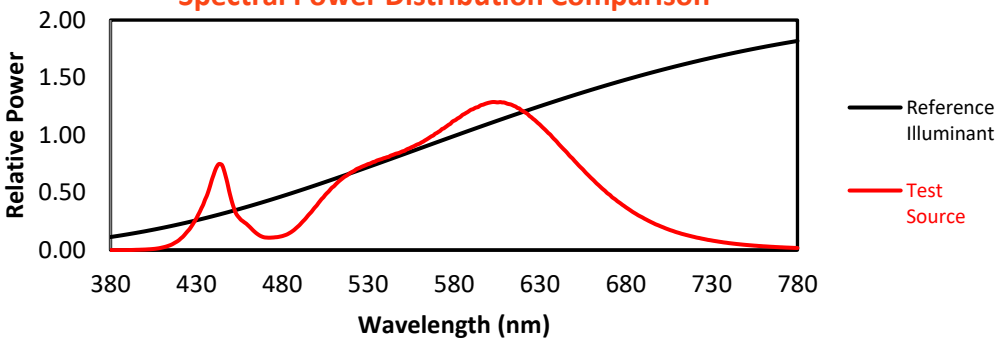
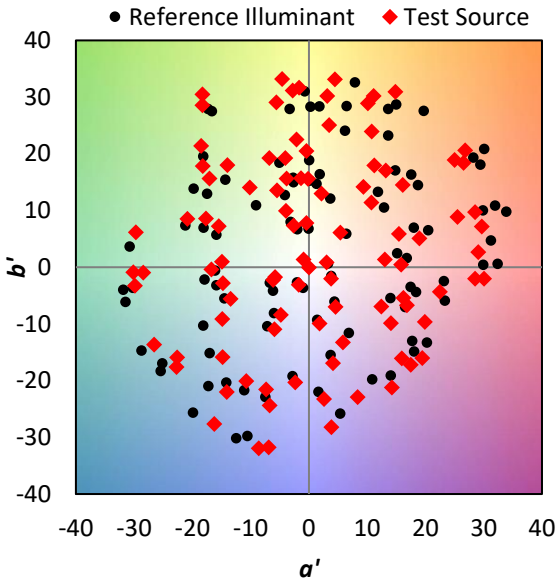
Summary

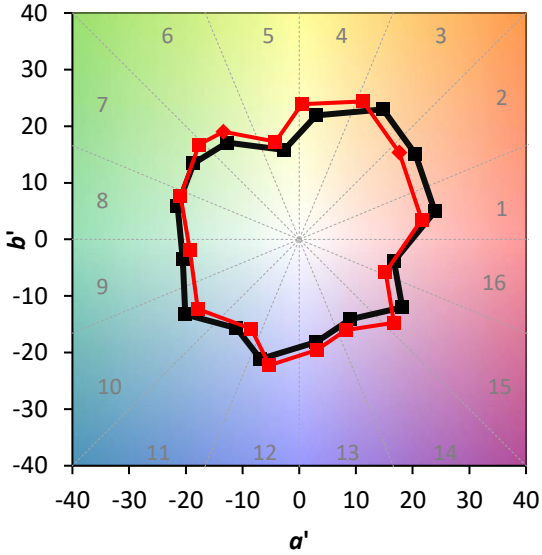
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

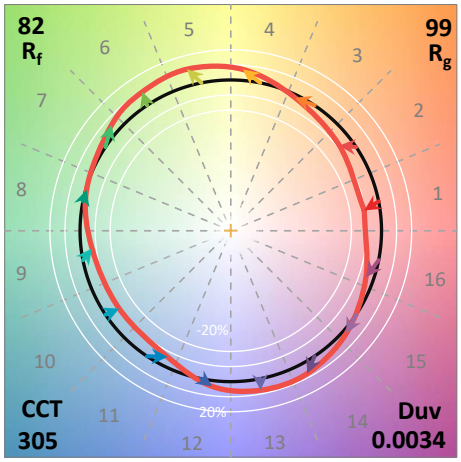
Spectral Power Distribution Comparison

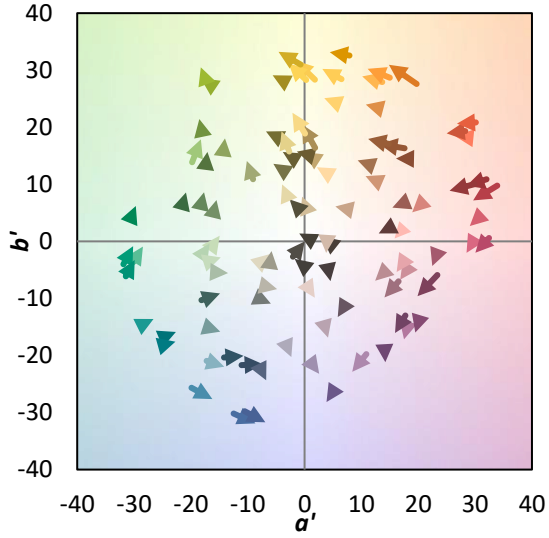


Color Vector Graphics









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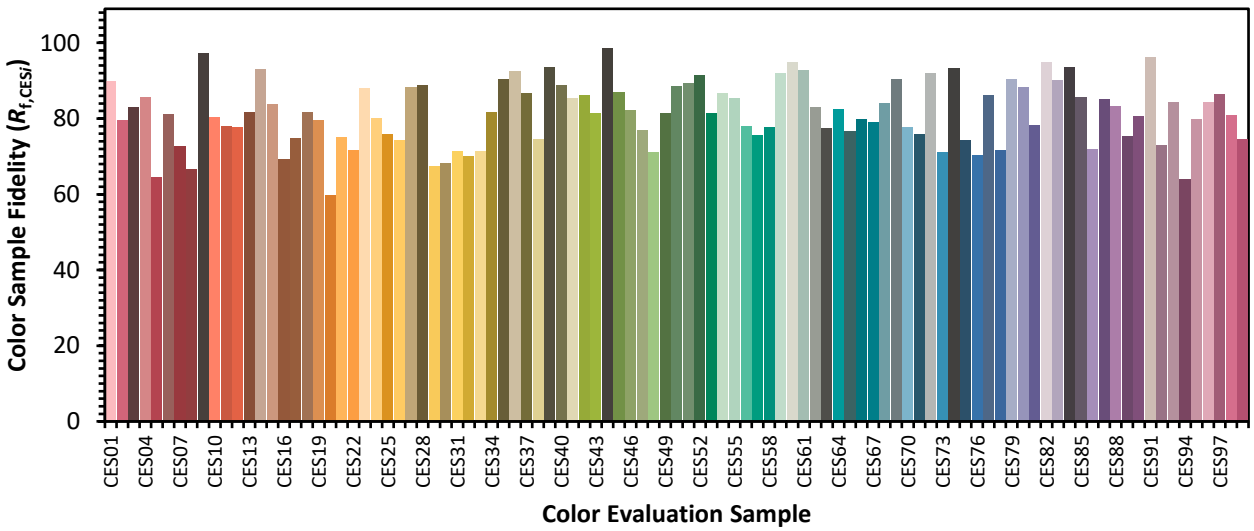
Individual Sample Fidelity Index ($R_{f,i}$)

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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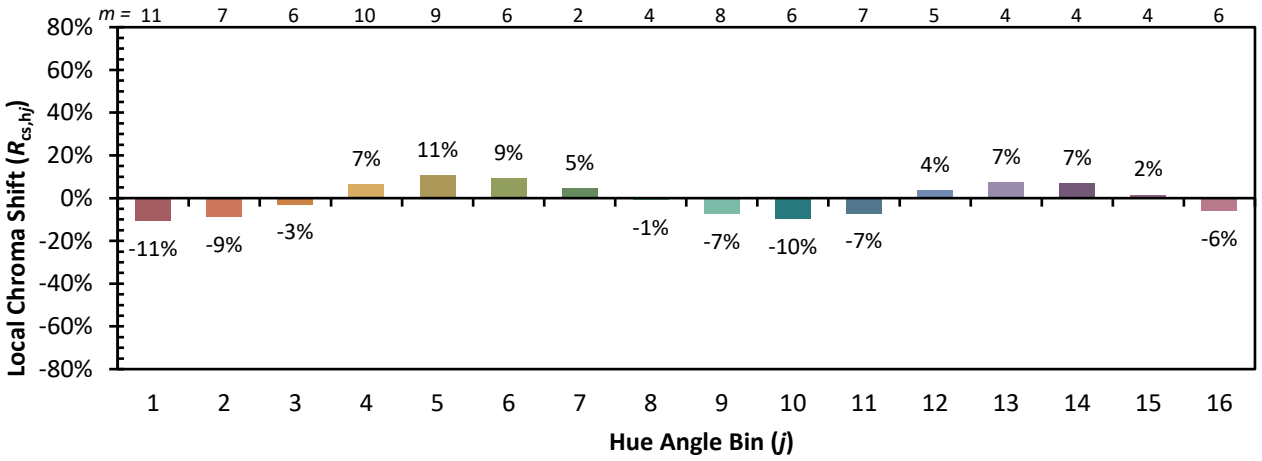
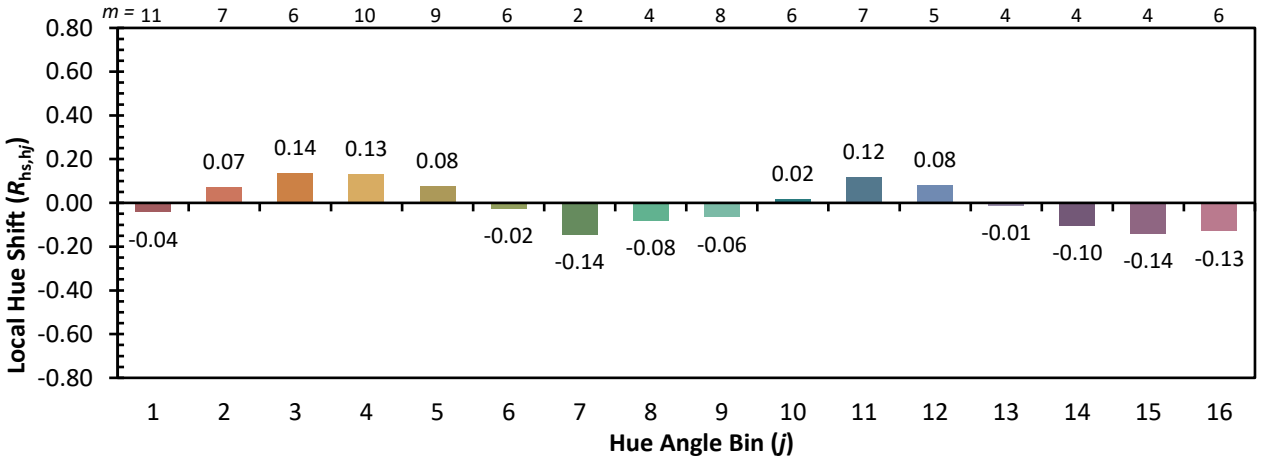
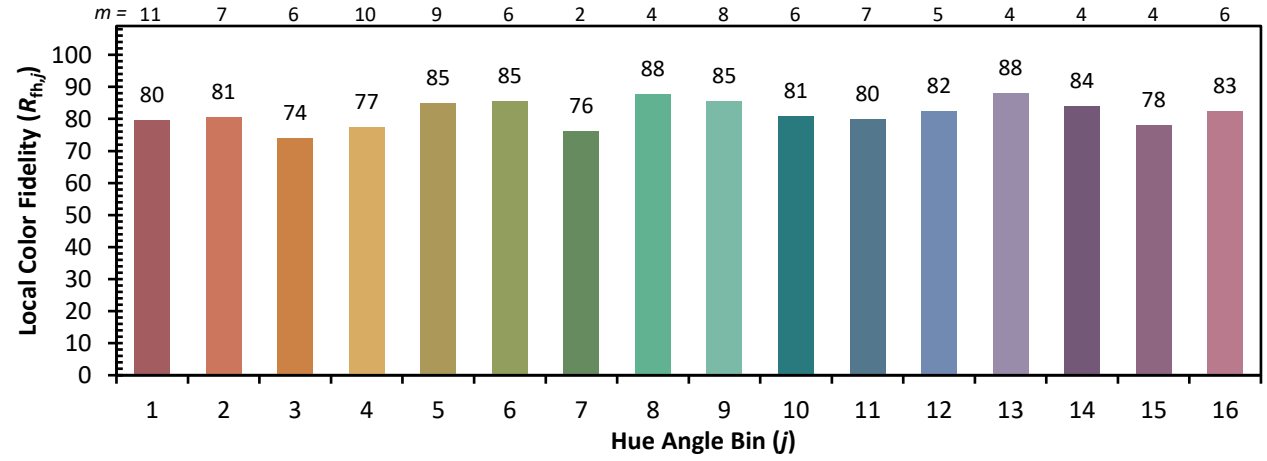
Color Rendition by Hue-Angle Bin







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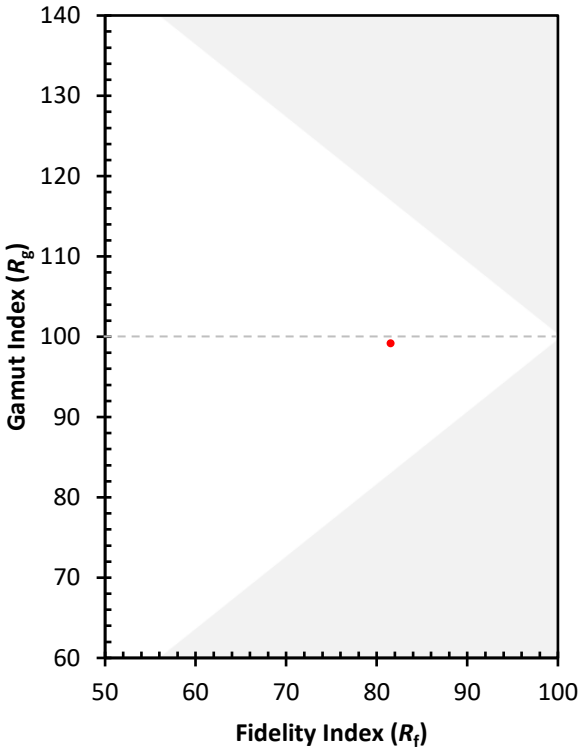
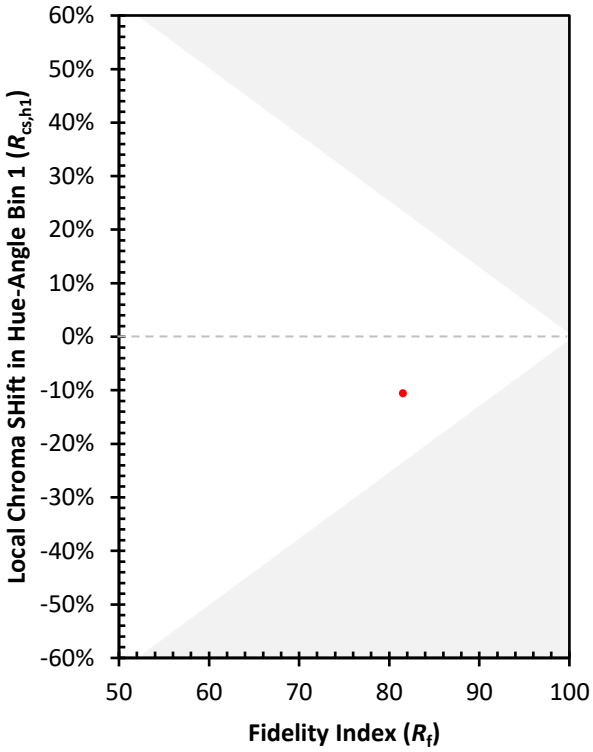
Measure Comparisons





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