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: P631545

Luminaire Tested: GWS-SA1F-830-U-SL3-W-HSS

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:	P631545
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-34)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1F-830-U-SL3-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5420.5 lumens
Efficiency:	N/A
Efficacy:	80.7 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B1 - U0 - G2

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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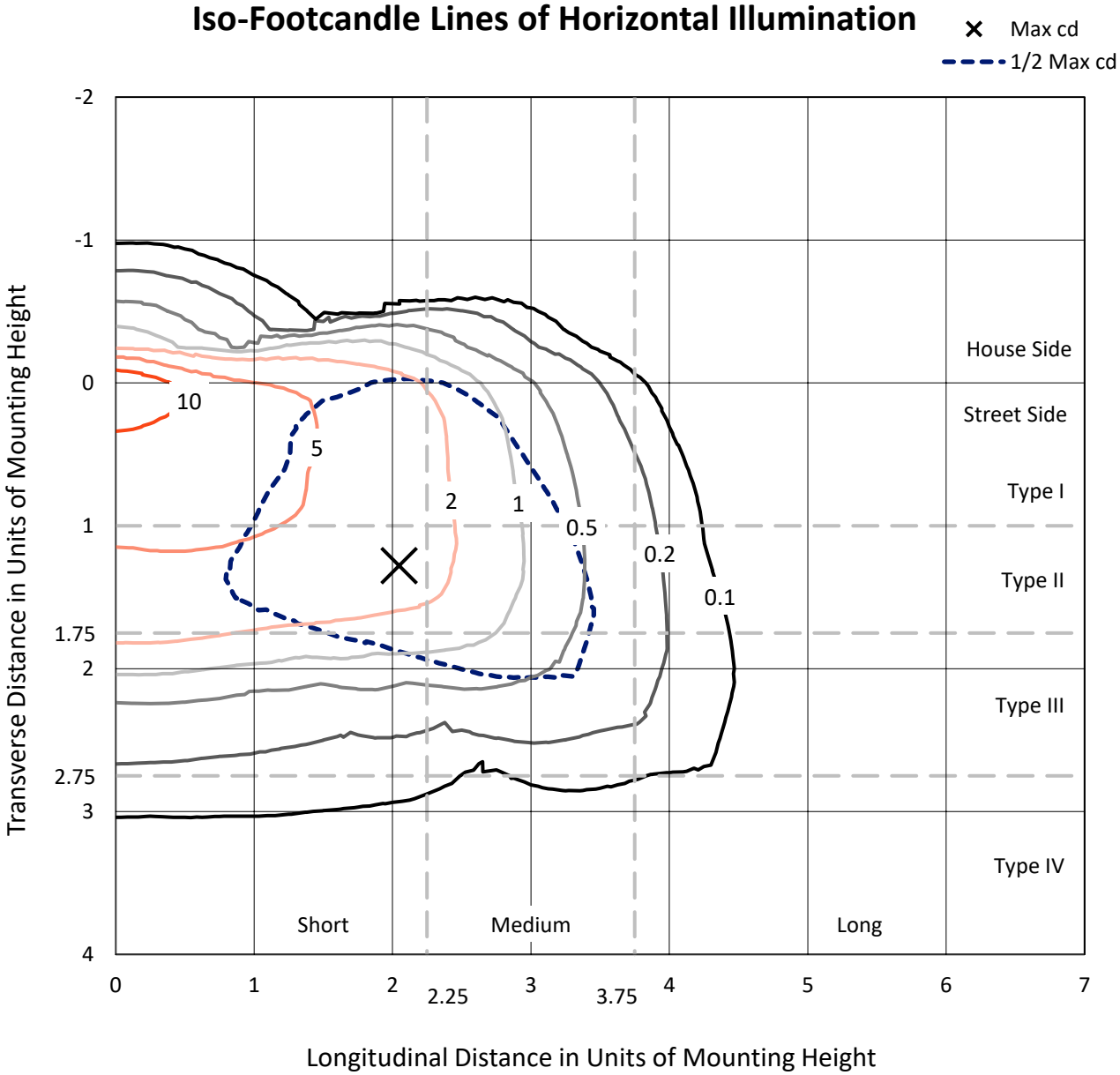
Scaled Data Report

REPORT NUMBER: P631545
CATALOG NUMBER: GWS-SA1F-830-U-SL3-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 15.6 fc
Type III - Short - N/A

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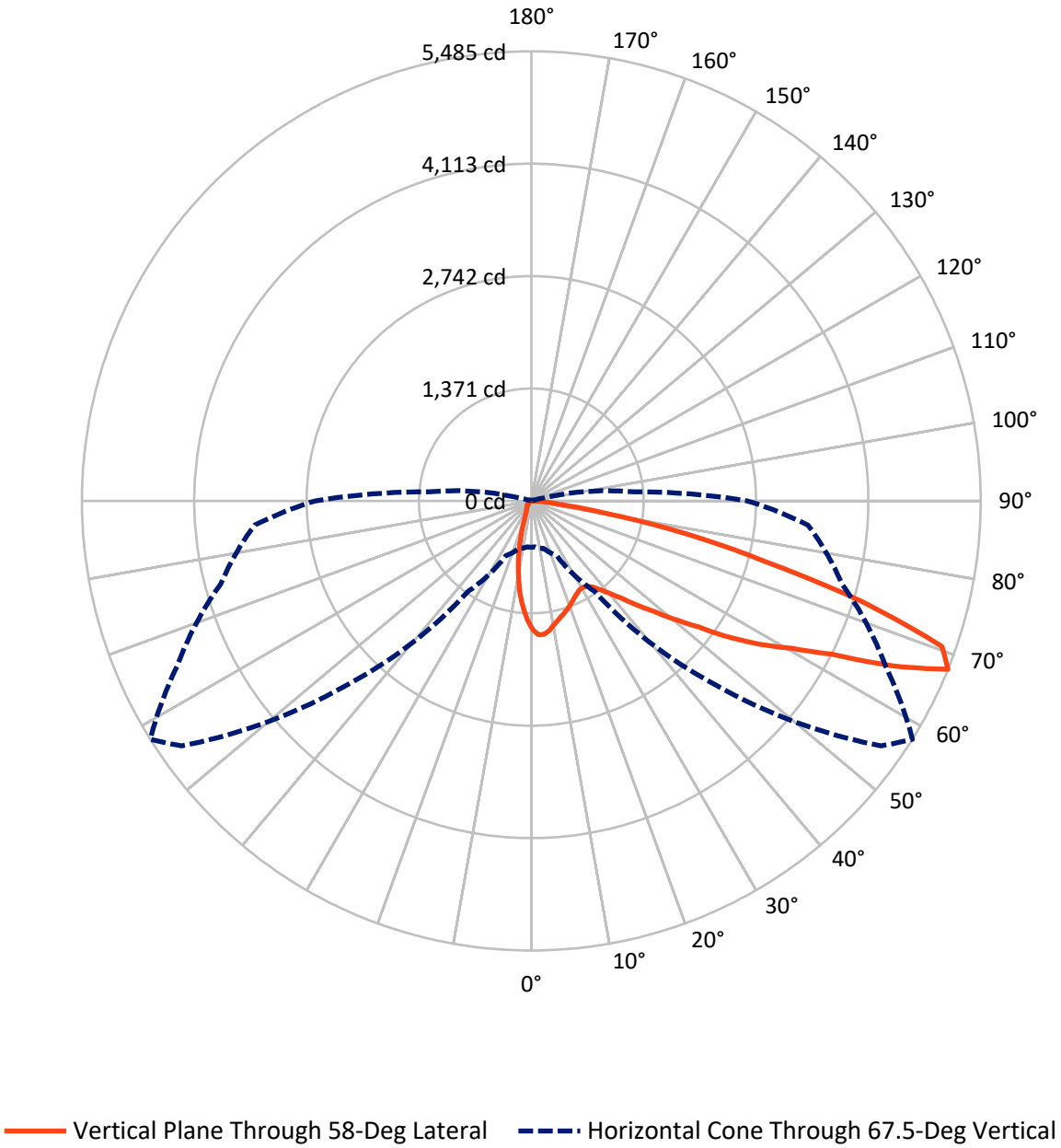
Luminous Intensity Polar Plot



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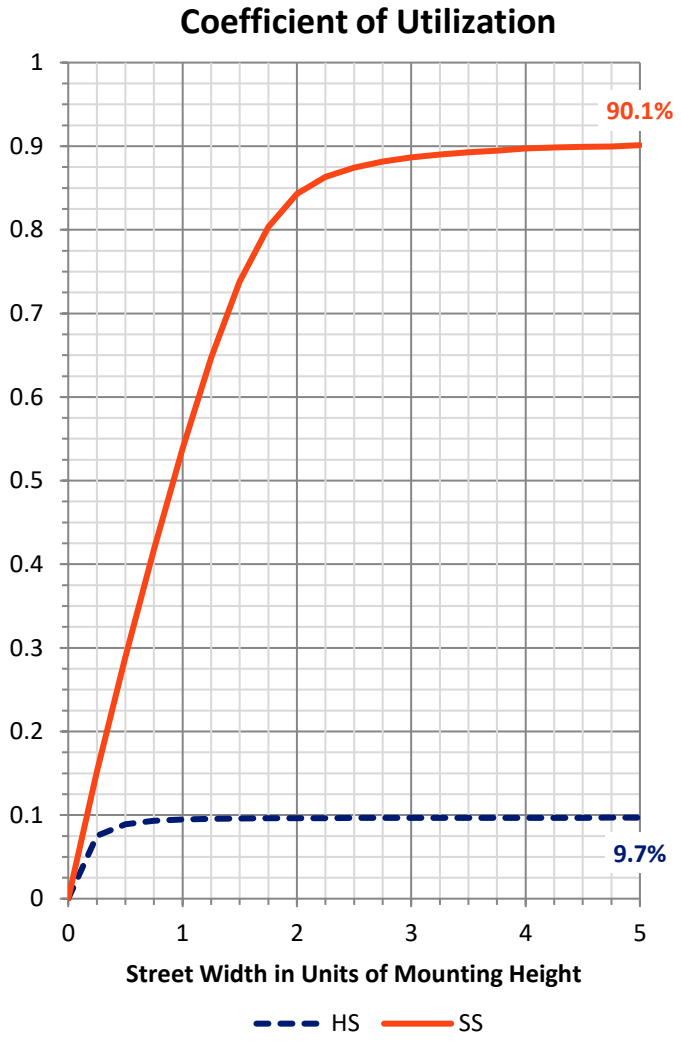
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	529.6	0.0	529.6
	% Fixture	9.8	0.0	9.8
Street Side	Lumens	4891.0	0.0	4891.0
	% Fixture	90.2	0.0	90.2
Total	Lumens	5420.5	0.0	5420.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.1	2.3
10°-20°	264.5	4.9
20°-30°	356.7	6.6
30°-40°	501.2	9.2
40°-50°	774.0	14.3
50°-60°	1237.8	22.8
60°-70°	1465.6	27.0
70°-80°	648.4	12.0
80°-90°	45.3	0.8
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°	5420.5	100.0
0°-180°	5420.5	100.0



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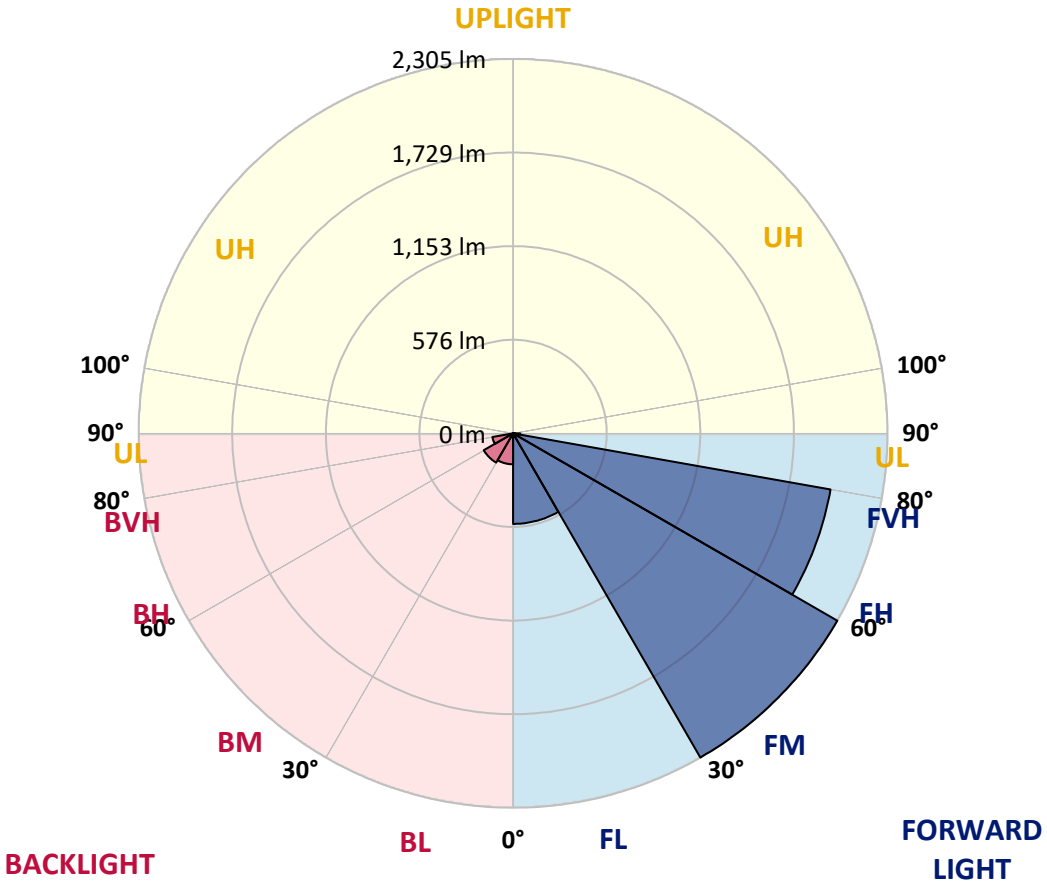
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	557.6	10.3			
FM	(30°-60°)	2305.2	42.5			
FH	(60°-80°)	1984.7	36.6			G2/5000
FVH	(80°-90°)	43.4	0.8			G1/100
BL	(0°-30°)	190.6	3.5	B1/500		
BM	(30°-60°)	207.8	3.8	B0/220		
BH	(60°-80°)	129.3	2.4	B1/500		G1/500
BVH	(80°-90°)	1.9	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-G2
Type III Short



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Scaled Data Report

REPORT NUMBER: P631545
CATALOG NUMBER: GWS-SA1F-830-U-SL3-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5
2.5°	1644.6	1647.5	1651.3	1656.1	1655.2	1650.8	1645.6	1633.6	1625.9	1601.9	1572.6
5°	1591.8	1591.4	1600.9	1610.1	1626.4	1635.0	1647.0	1636.0	1632.1	1603.3	1555.9
7.5°	1488.7	1494.0	1505.0	1519.4	1542.9	1568.3	1597.1	1593.8	1605.3	1586.1	1527.1
10°	1387.5	1384.6	1401.8	1423.4	1459.4	1492.0	1533.8	1533.3	1563.5	1561.6	1494.4
12.5°	1298.7	1298.2	1311.7	1336.1	1378.3	1423.9	1480.5	1482.0	1519.4	1534.7	1466.6
15°	1223.9	1224.8	1237.8	1263.2	1306.9	1362.5	1428.2	1440.2	1482.4	1513.6	1439.3
17.5°	1170.6	1171.1	1178.8	1200.8	1243.5	1303.0	1382.2	1398.5	1452.7	1497.8	1417.2
20°	1146.1	1144.2	1145.7	1156.7	1189.8	1244.0	1335.2	1356.3	1425.4	1486.8	1397.1
22.5°	1149.5	1146.6	1139.9	1138.5	1153.3	1194.6	1285.3	1311.2	1395.6	1480.0	1378.8
25°	1179.2	1173.0	1163.4	1149.0	1143.3	1163.9	1241.6	1268.5	1367.8	1480.5	1364.9
27.5°	1224.8	1218.1	1206.1	1186.9	1164.4	1155.7	1211.9	1237.3	1348.1	1491.6	1358.2
30°	1282.9	1277.6	1266.1	1243.0	1212.8	1177.3	1205.6	1226.7	1338.5	1514.1	1361.1
32.5°	1351.5	1347.6	1338.0	1316.9	1282.4	1228.2	1226.7	1243.0	1346.2	1546.7	1372.1
35°	1417.7	1419.1	1419.6	1408.1	1371.1	1305.4	1284.8	1290.5	1377.9	1595.7	1397.1
37.5°	1489.2	1485.8	1503.1	1511.2	1475.7	1405.7	1374.5	1375.0	1438.3	1668.1	1444.1
40°	1543.4	1544.3	1581.8	1615.3	1600.5	1532.8	1488.2	1487.7	1531.4	1767.4	1519.9
42.5°	1594.2	1600.5	1655.6	1713.2	1733.8	1673.9	1641.7	1629.7	1661.9	1901.8	1633.6
45°	1648.4	1657.6	1734.8	1816.8	1871.1	1835.5	1810.1	1814.9	1818.8	2058.2	1786.6
47.5°	1711.8	1717.5	1813.0	1928.6	2029.8	2020.7	2022.2	2016.4	2014.5	2255.3	1989.1
50°	1788.5	1802.0	1911.8	2050.0	2188.2	2248.6	2268.8	2271.2	2240.0	2470.3	2198.7
52.5°	1951.6	1968.0	2062.0	2182.9	2360.9	2488.0	2570.1	2553.7	2505.8	2678.5	2428.5
55°	2144.0	2156.5	2247.2	2372.4	2572.0	2750.4	2945.2	2938.5	2821.0	2897.7	2617.6
57.5°	2162.3	2176.2	2316.7	2508.6	2843.0	3074.8	3279.6	3301.2	3129.0	3053.2	2786.4
60°	1957.4	1985.7	2177.6	2435.7	2946.7	3510.9	3646.1	3650.5	3354.9	3211.0	2992.7
62.5°	1568.8	1582.2	1775.6	2112.4	2786.9	3765.1	4206.0	4114.9	3645.2	3455.2	3319.4
65°	822.3	877.0	1045.4	1418.2	2260.1	3676.4	4879.6	4854.7	4167.2	3804.9	3573.7
67.5°	564.2	563.7	603.5	739.3	1347.6	3165.4	5210.2	5484.6	4770.7	3924.9	3389.5
70°	429.4	430.8	466.3	554.6	698.0	2107.1	4847.5	5316.7	4883.0	3563.6	2741.3
72.5°	285.0	287.9	346.9	448.1	557.5	1032.9	3767.0	4254.0	4108.6	2862.2	1929.6
75°	170.3	172.7	214.9	325.8	495.6	578.1	2393.5	2940.9	2828.2	1972.8	1034.4
77.5°	70.0	72.0	110.3	202.9	362.7	449.1	1323.6	1924.3	1694.0	784.4	282.6
80°	29.3	30.2	53.3	142.0	261.5	281.6	613.1	904.3	694.2	168.9	86.4
82.5°	10.6	11.0	19.7	78.2	162.6	212.1	309.4	357.4	195.7	55.2	46.5
85°	0.5	0.5	4.8	26.4	61.9	60.0	177.0	171.3	64.8	23.0	27.8
87.5°	0.0	0.0	0.5	0.5	1.0	2.4	16.8	29.7	13.9	5.8	12.0
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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REPORT NUMBER: P631545
CATALOG NUMBER: GWS-SA1F-830-U-SL3-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5
2.5°	1553.5	1528.0	1500.2	1474.3	1433.0	1408.6	1378.3	1364.9	1345.7	1340.9	1343.8
5°	1521.8	1478.1	1411.4	1351.0	1272.8	1209.9	1146.6	1119.8	1085.2	1062.2	1052.6
7.5°	1477.2	1420.1	1316.0	1206.1	1098.6	984.0	896.7	839.1	786.8	758.0	752.3
10°	1432.1	1357.7	1208.5	1051.1	884.7	747.5	629.4	542.1	471.1	439.0	414.0
12.5°	1385.5	1292.9	1099.1	893.8	700.4	513.3	367.5	282.6	231.7	211.6	214.9
15°	1342.8	1230.6	990.7	736.4	493.2	309.9	202.9	171.3	159.3	155.4	155.0
17.5°	1302.1	1171.6	882.8	583.4	325.3	190.0	155.4	147.8	144.4	142.5	142.5
20°	1265.1	1115.0	777.2	439.5	210.1	150.6	140.6	136.7	133.9	132.4	132.4
22.5°	1230.6	1060.3	674.1	310.9	155.0	135.3	129.1	125.2	121.9	119.9	119.9
25°	1199.4	1010.8	575.7	214.0	133.4	123.8	117.1	112.7	107.0	103.6	103.6
27.5°	1176.8	966.7	481.2	155.9	120.4	111.3	103.6	97.9	91.6	87.8	86.8
30°	1163.4	929.3	385.7	128.1	108.4	99.3	90.7	83.5	76.3	72.4	72.0
32.5°	1155.7	894.7	298.4	111.8	98.4	87.8	78.2	70.5	63.3	59.0	58.5
35°	1158.6	867.9	223.6	100.7	88.8	77.7	67.2	59.5	53.3	49.4	48.5
37.5°	1183.6	855.9	167.9	92.1	80.6	69.1	58.1	50.9	45.1	42.2	41.7
40°	1232.0	858.3	131.9	85.4	73.9	60.4	49.9	43.2	38.9	36.5	36.0
42.5°	1307.3	878.4	108.9	79.6	66.7	52.8	43.2	37.9	33.6	31.2	30.7
45°	1419.6	920.2	95.0	72.9	59.0	45.6	37.4	32.6	28.8	25.9	25.4
47.5°	1582.2	992.6	85.9	66.7	52.3	39.3	32.1	27.3	24.0	21.6	21.1
50°	1755.4	1079.5	78.2	60.4	46.5	34.1	27.3	22.5	19.7	17.3	16.8
52.5°	1940.1	1173.0	72.4	54.7	41.3	29.3	23.0	18.7	15.8	13.4	13.0
55°	2117.6	1267.0	65.7	50.9	35.0	24.9	19.2	15.4	12.5	10.6	10.6
57.5°	2290.4	1353.4	58.5	44.6	28.8	21.1	15.8	12.5	10.1	8.6	8.2
60°	2496.7	1472.9	50.4	37.9	24.0	17.8	13.0	10.1	8.2	6.7	6.7
62.5°	2803.2	1597.1	43.2	31.7	20.1	14.9	10.6	8.2	6.7	5.8	5.3
65°	2903.5	1529.9	36.5	25.9	16.3	12.0	8.6	7.2	5.8	5.3	4.8
67.5°	*2635.8*	*1254.1*	*30.2*	*21.1*	*13.4*	*10.1*	*7.7*	*6.2*	*5.3*	*4.8*	*4.3*
70°	2056.7	889.9	23.5	15.8	11.0	8.2	6.7	5.8	4.8	4.3	4.3
72.5°	1399.0	526.3	18.7	12.0	9.1	7.2	5.8	5.3	4.8	4.3	3.8
75°	688.9	187.1	14.4	9.1	7.2	6.2	5.3	4.8	4.3	3.8	3.8
77.5°	185.7	51.8	11.0	7.2	5.8	4.8	4.8	4.8	4.3	3.4	3.4
80°	62.8	21.6	8.2	5.3	4.8	3.8	3.4	4.3	3.8	3.4	2.9
82.5°	34.5	10.6	5.8	4.3	3.4	2.9	2.9	2.9	2.9	2.4	2.4
85°	22.1	5.8	3.8	3.4	3.4	2.4	1.9	1.9	1.4	1.4	1.4
87.5°	10.1	3.4	3.4	2.9	2.9	2.4	1.4	1.0	0.5	0.5	0.5
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

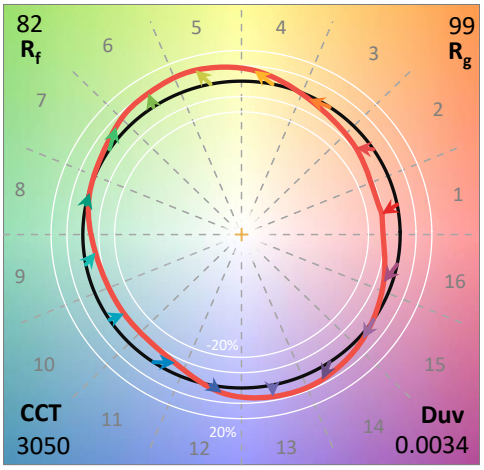
Test Information

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

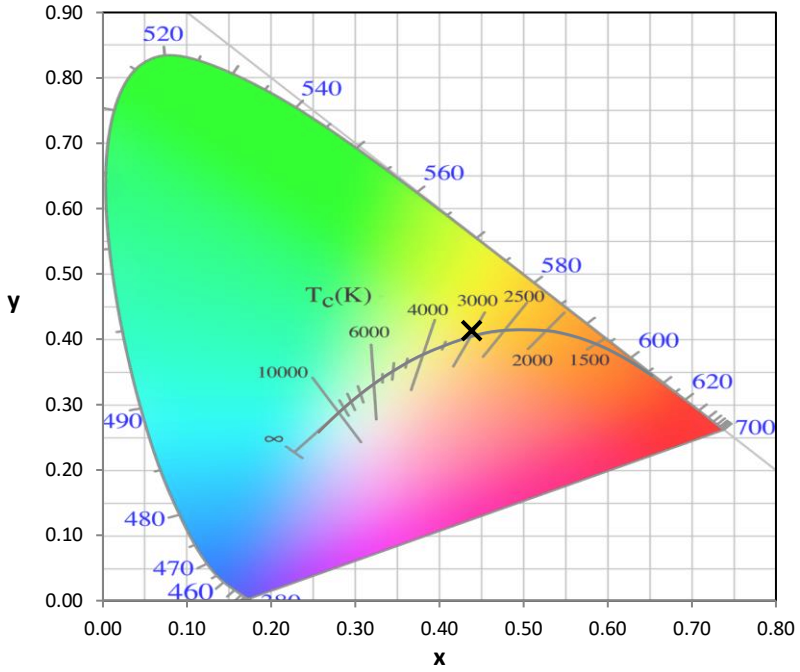
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

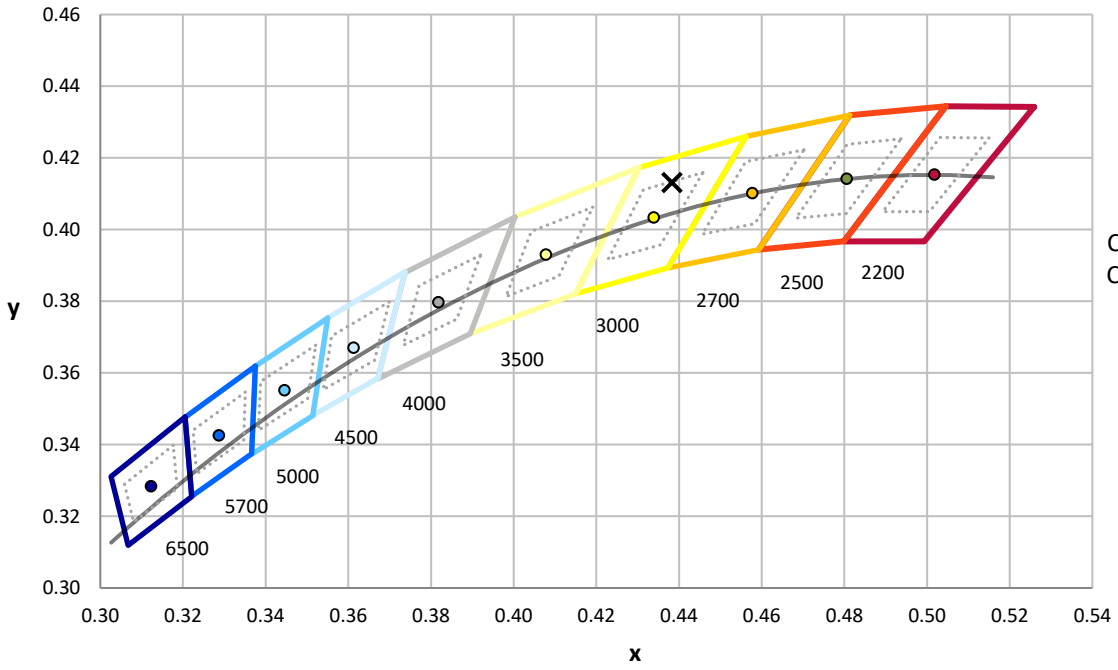
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

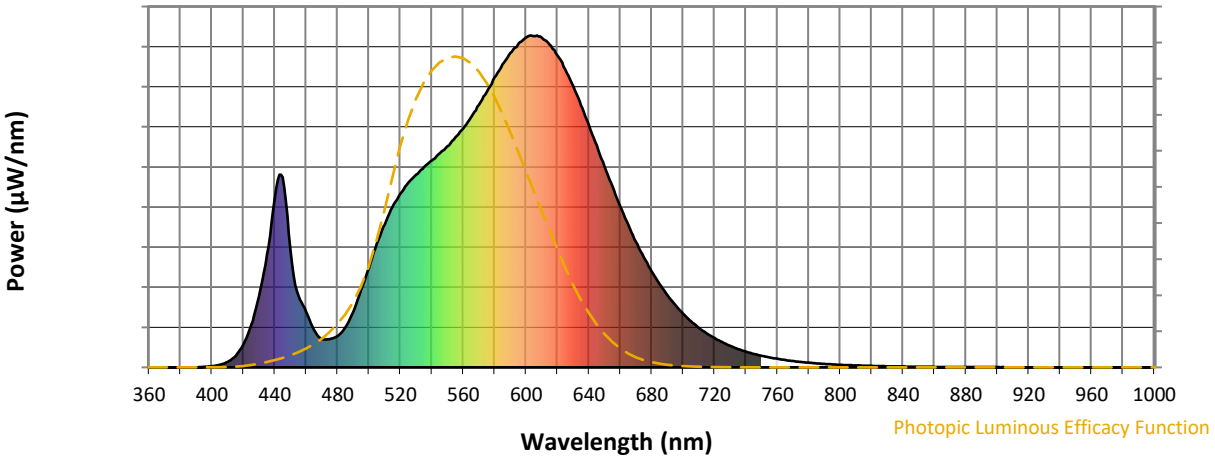


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

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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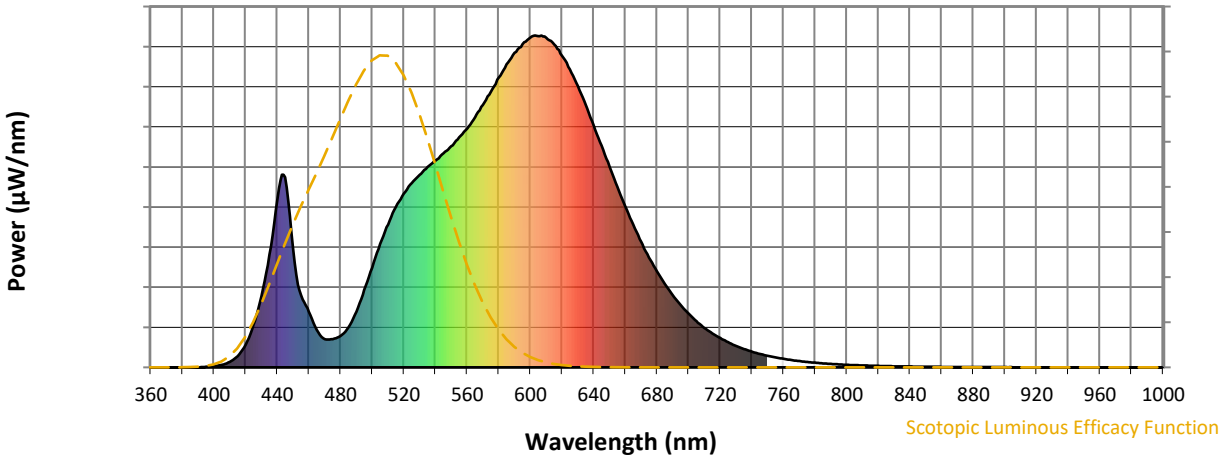
Scotopic Flux vs. Wavelength



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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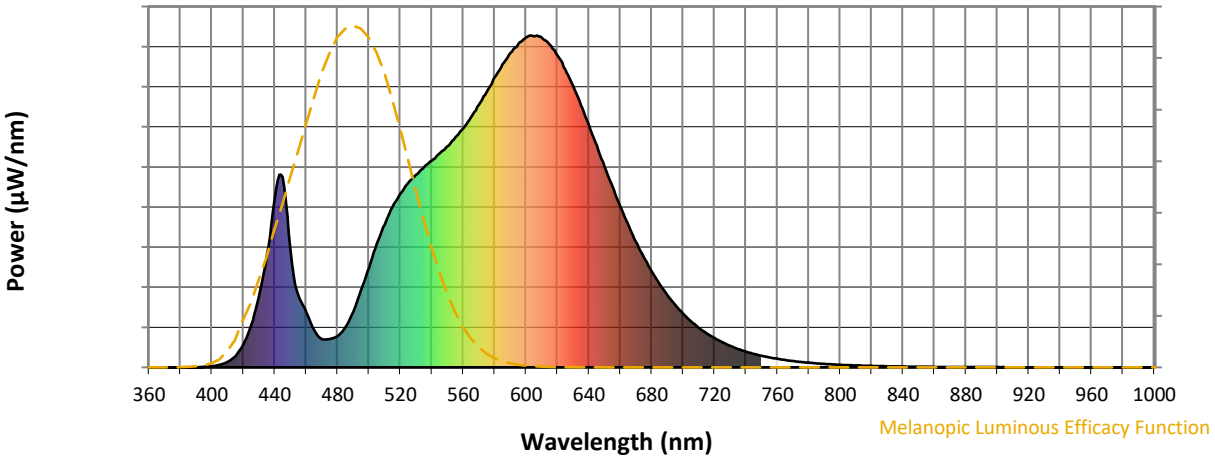
Melanopic Flux vs. Wavelength



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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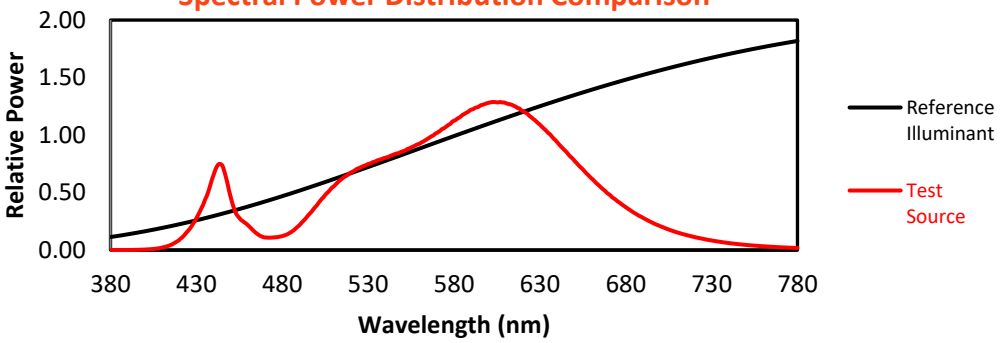
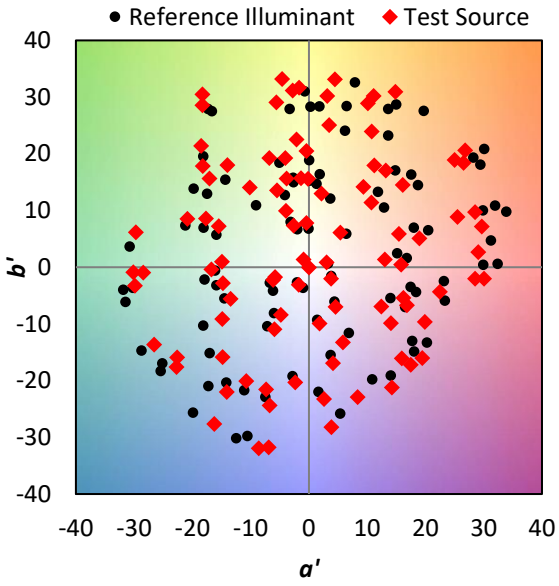
Summary

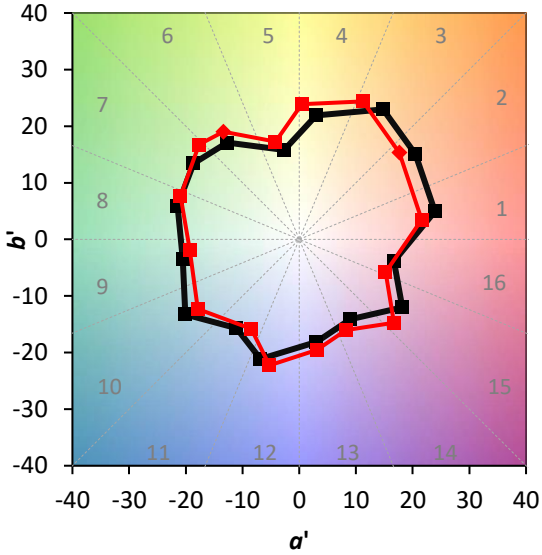
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

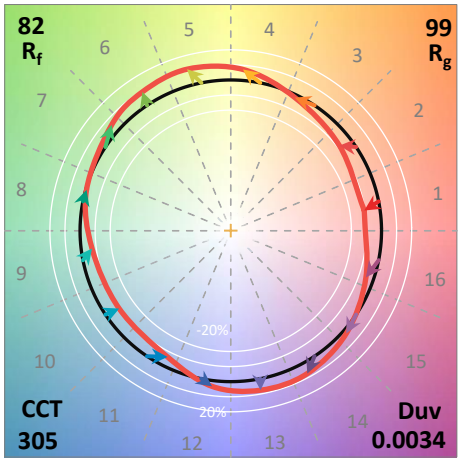
Spectral Power Distribution Comparison

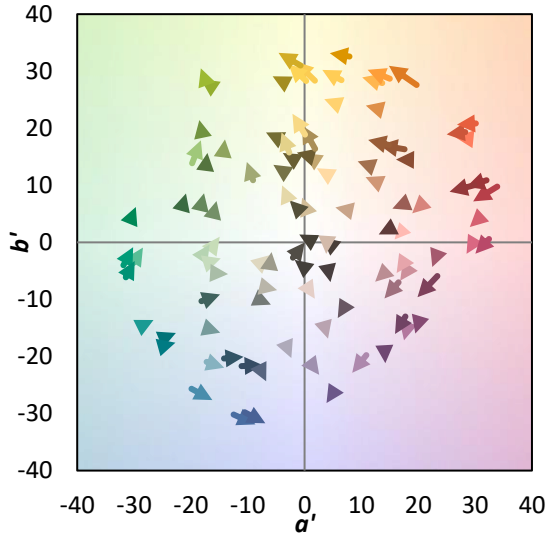


Color Vector Graphics









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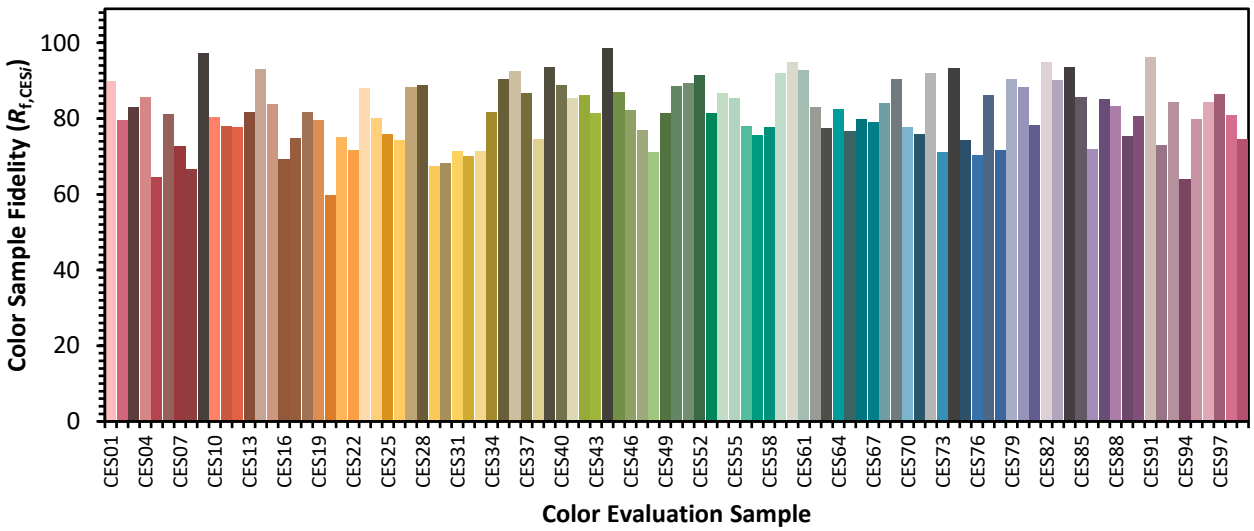
Individual Sample Fidelity Index ($R_{f,i}$)

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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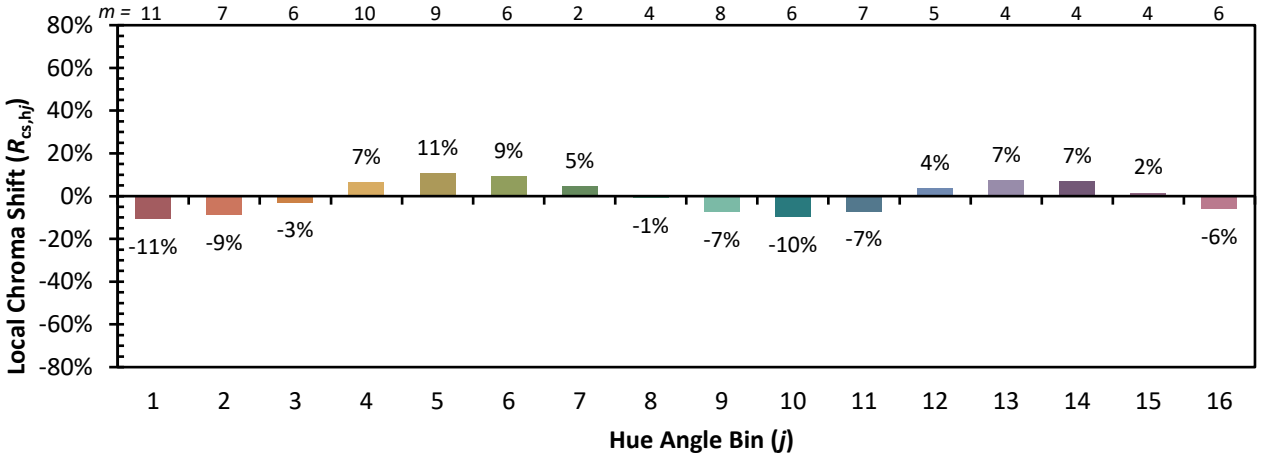
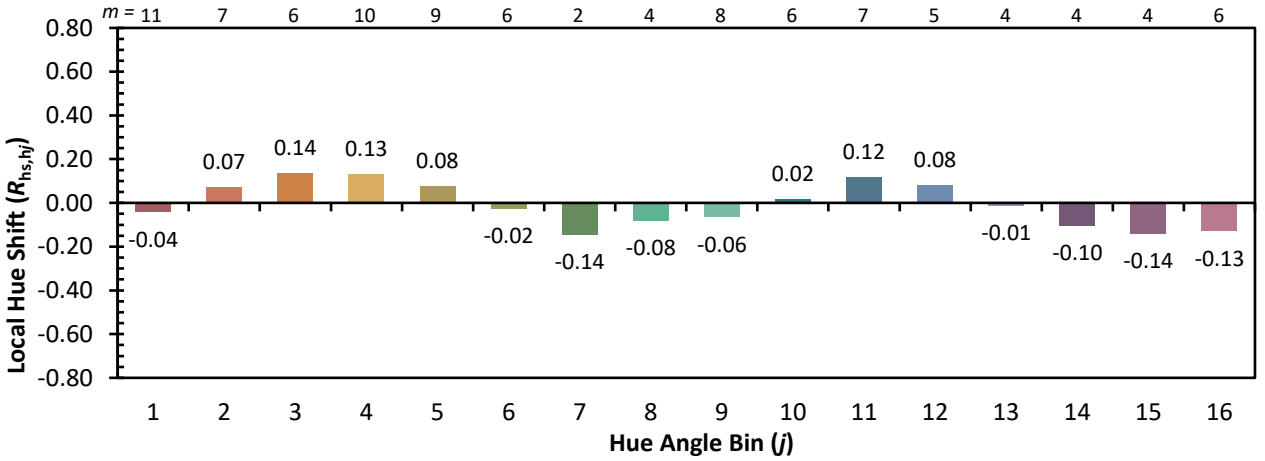
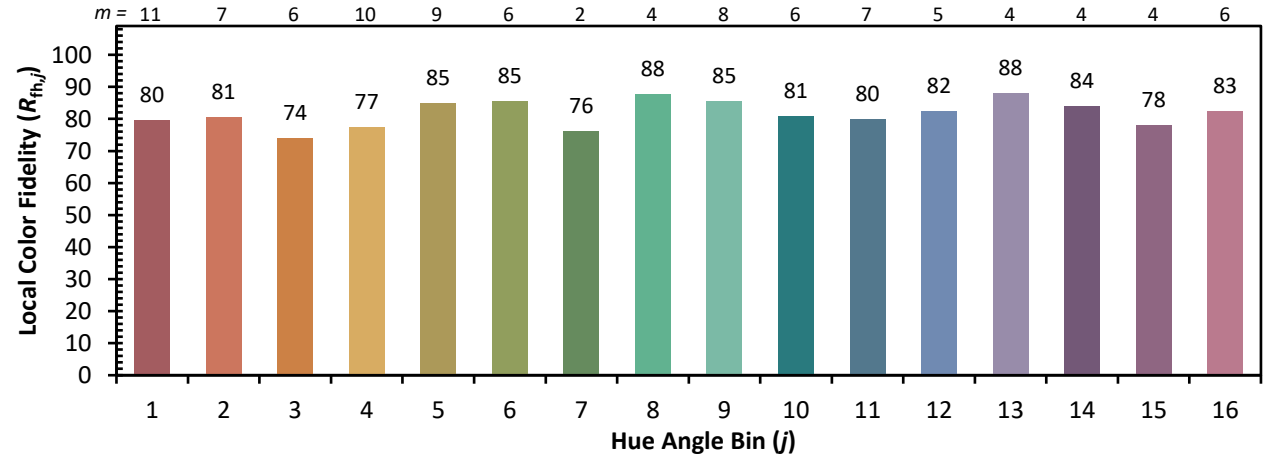
Color Rendition by Hue-Angle Bin







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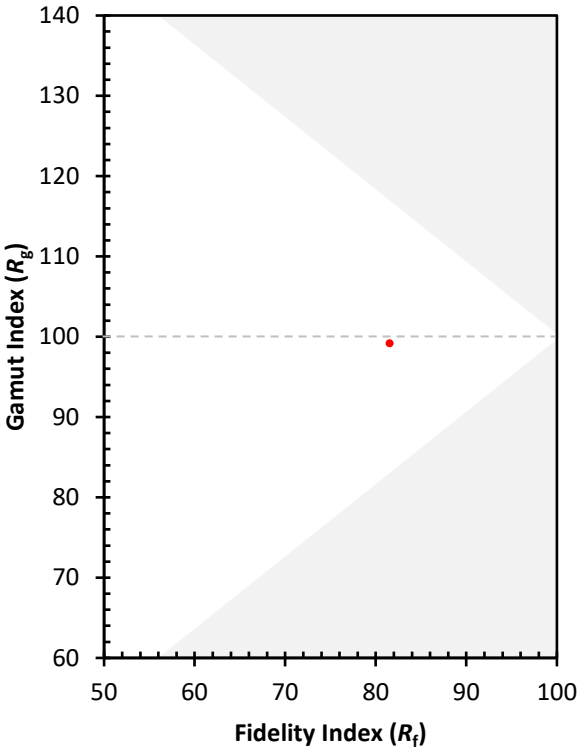
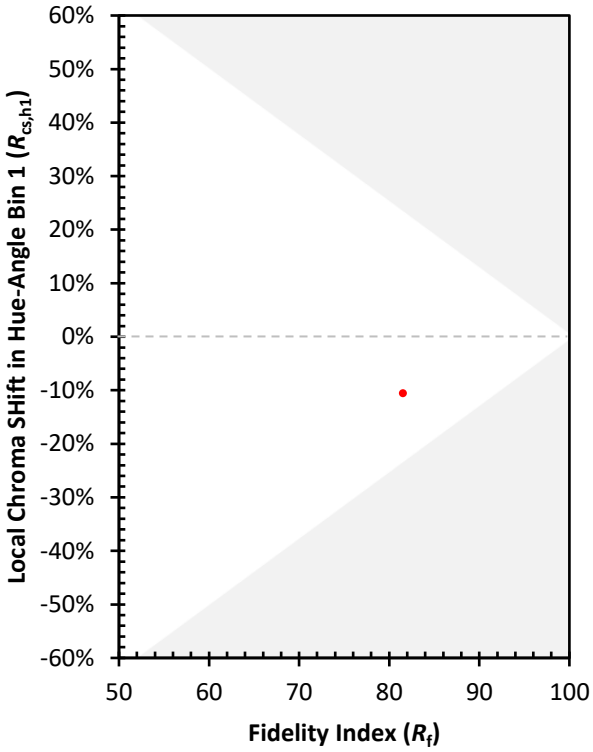
Measure Comparisons





(END OF REPORT)