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: P631547

Luminaire Tested: GWS-SA1F-830-U-SL4-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:	P631547
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-36)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1F-830-U-SL4-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV 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:	5273.2 lumens
Efficiency:	N/A
Efficacy:	78.5 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type IV - 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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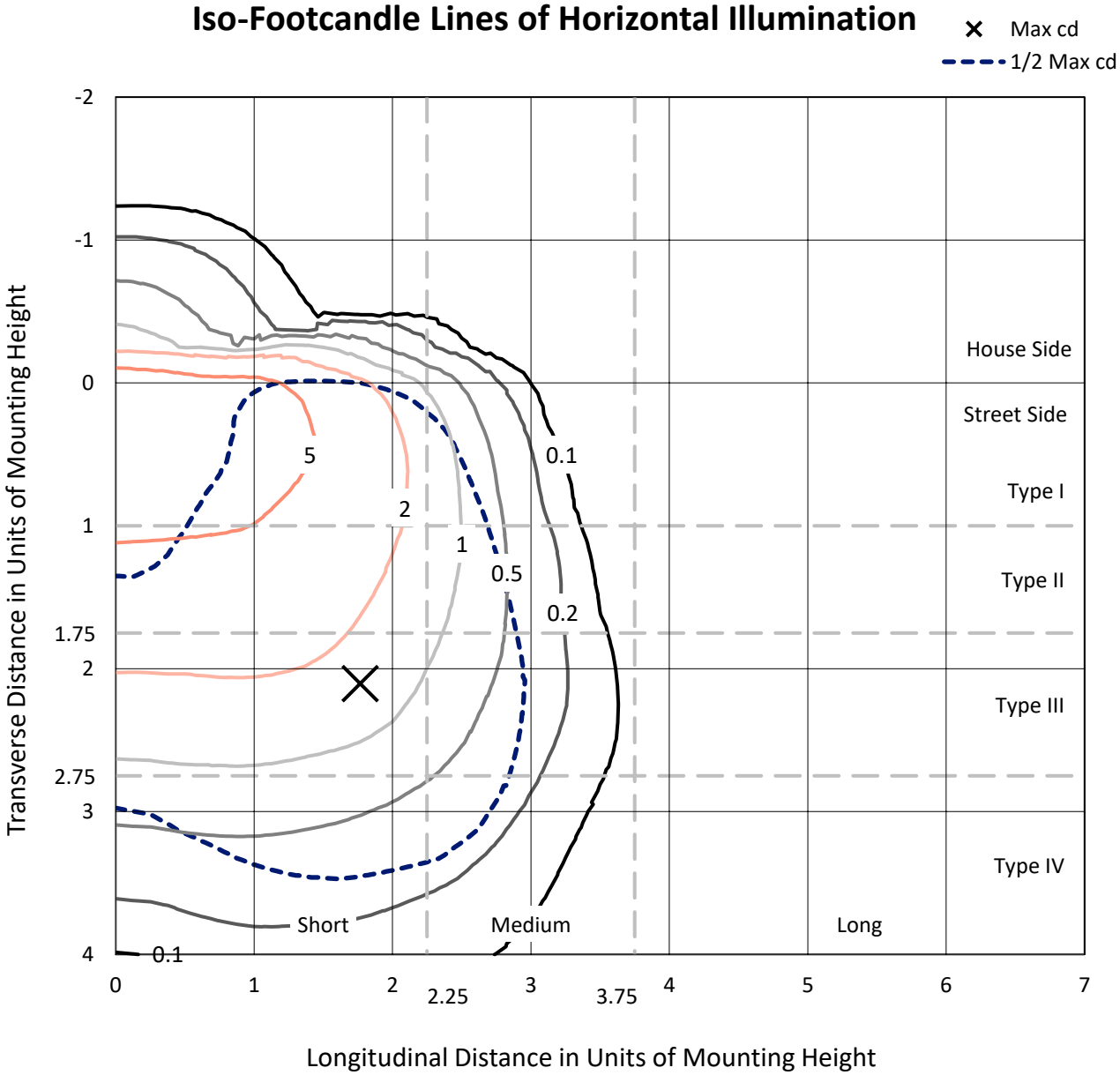
REPORT NUMBER: P631547
CATALOG NUMBER: GWS-SA1F-830-U-SL4-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 9.7 fc
Type IV - Short - N/A

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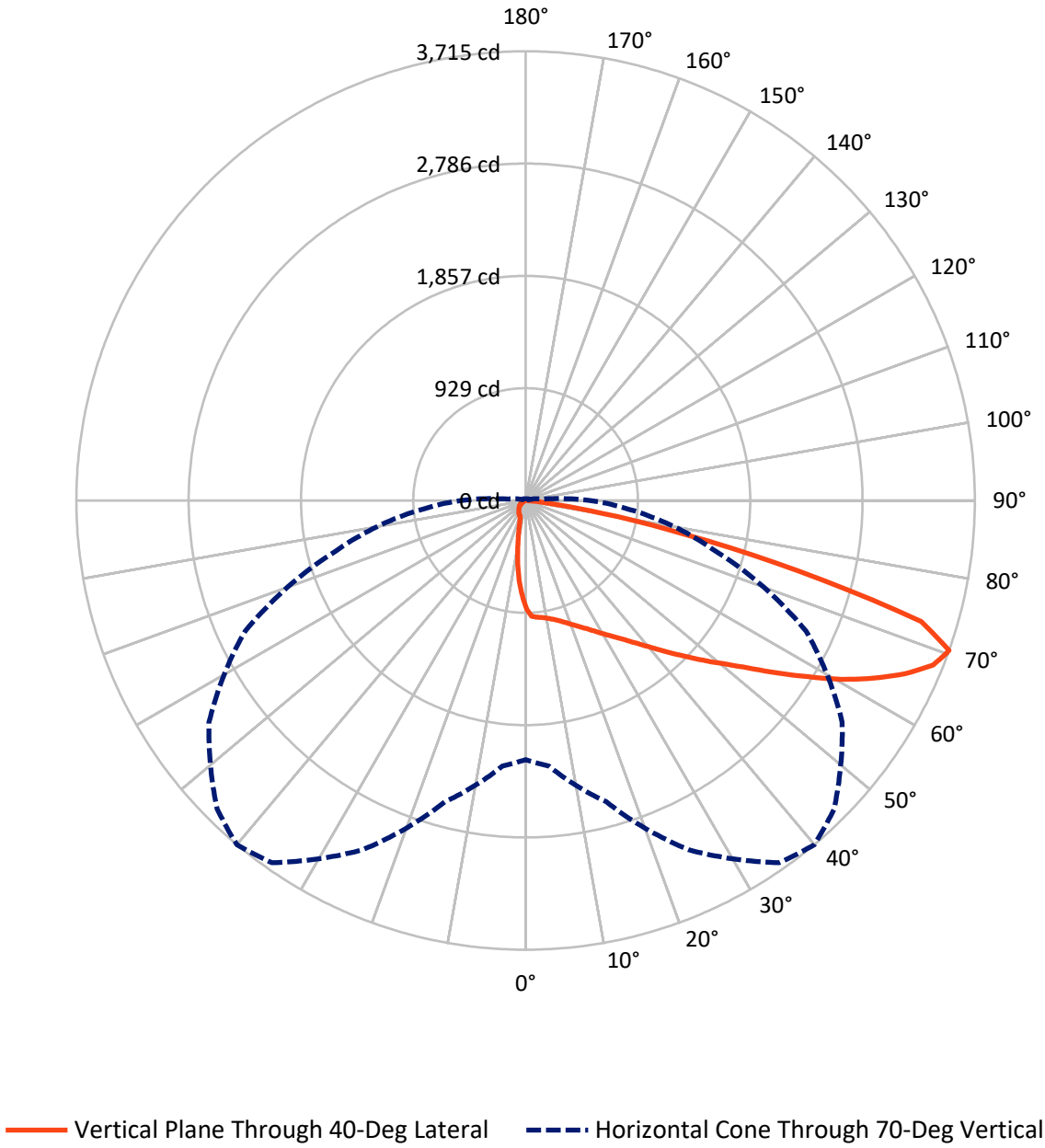
Luminous Intensity Polar Plot



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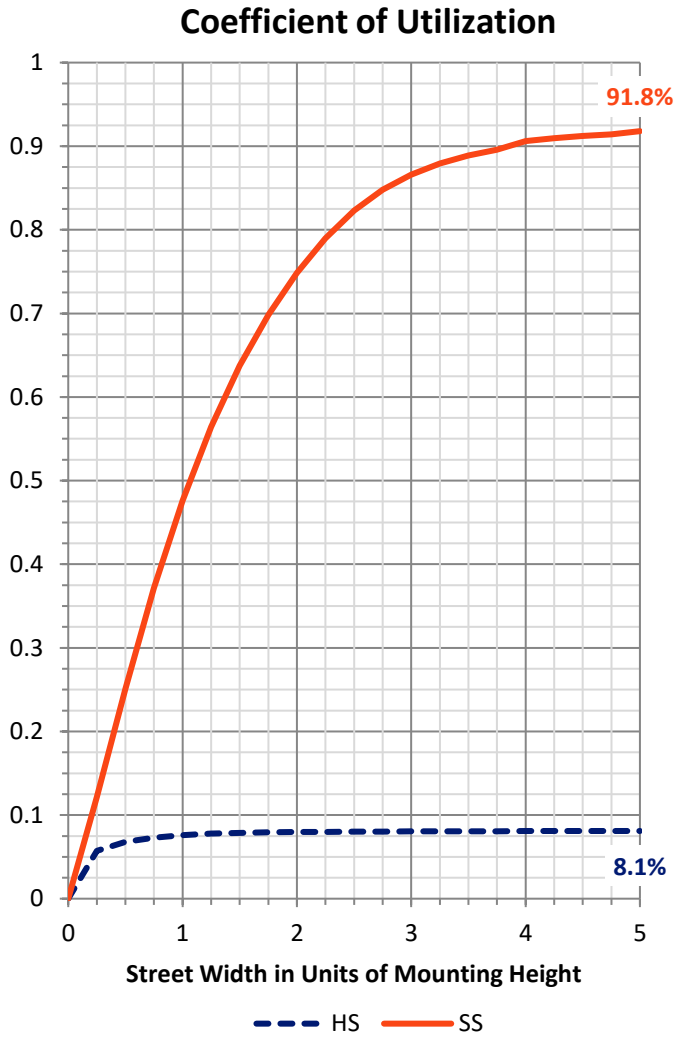
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	431.2	0.0	431.2
	% Fixture	8.2	0.0	8.2
Street Side	Lumens	4842.0	0.0	4842.0
	% Fixture	91.8	0.0	91.8
Total	Lumens	5273.2	0.0	5273.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	1.4
10°-20°	191.8	3.6
20°-30°	321.0	6.1
30°-40°	504.2	9.6
40°-50°	797.5	15.1
50°-60°	1163.4	22.1
60°-70°	1442.2	27.4
70°-80°	729.7	13.8
80°-90°	47.6	0.9
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°	5273.2	100.0
0°-180°	5273.2	100.0



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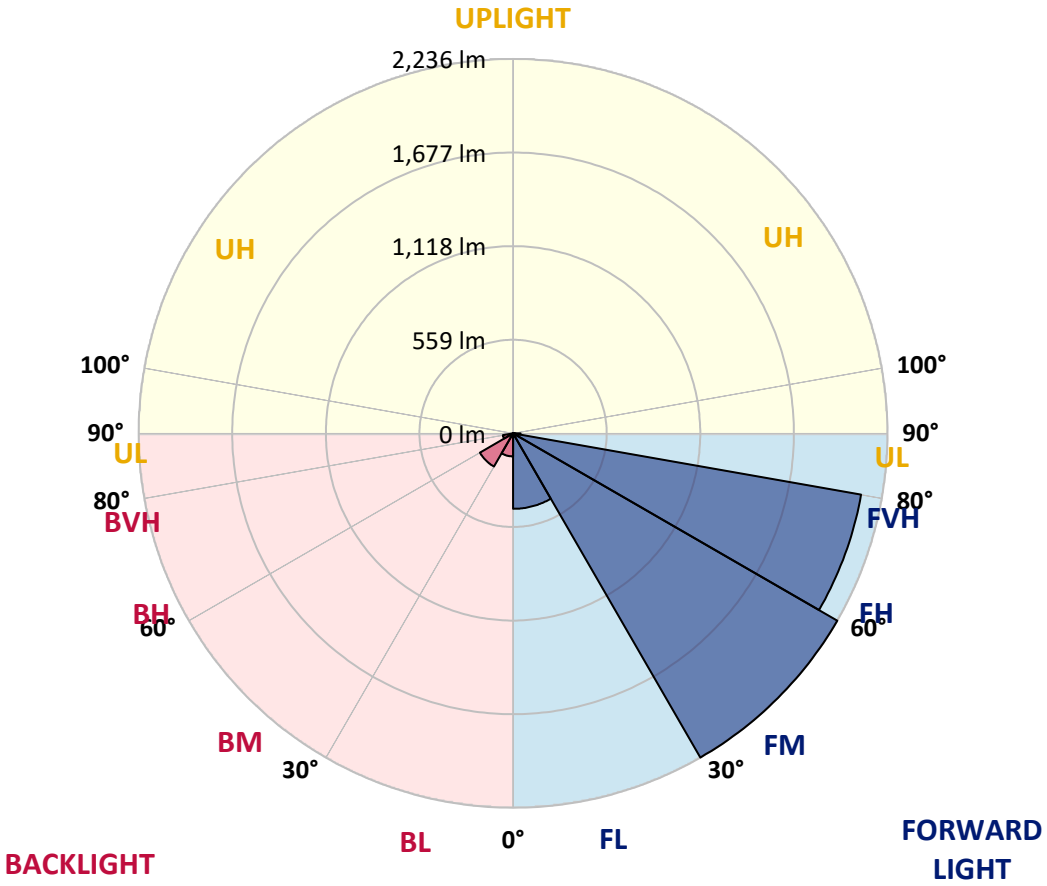
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	450.8	8.5			
FM	(30°-60°)	2236.3	42.4			
FH	(60°-80°)	2110.4	40.0			G2/5000
FVH	(80°-90°)	44.5	0.8			G1/100
BL	(0°-30°)	137.7	2.6	B1/500		
BM	(30°-60°)	228.9	4.3	B1/1000		
BH	(60°-80°)	61.5	1.2	B0/110		G0/110
BVH	(80°-90°)	3.1	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-G2
Type IV Short



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REPORT NUMBER: P631547
CATALOG NUMBER: GWS-SA1F-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	894.8	894.8	894.8	894.8	894.8	*894.8*	894.8	894.8	894.8	894.8	894.8
2.5°	962.0	965.3	964.8	966.3	962.9	*957.7*	956.7	949.5	936.5	920.2	902.0
5°	981.6	985.5	982.6	981.2	974.9	*969.2*	967.7	960.0	945.2	923.1	891.4
7.5°	998.4	999.4	997.5	994.1	985.0	*977.3*	972.0	961.5	943.7	921.7	885.2
10°	1001.3	1000.8	1001.8	1002.3	996.5	*989.8*	985.5	971.1	948.5	925.0	885.7
12.5°	998.0	998.0	1004.2	1011.4	1011.4	*1008.0*	1003.7	990.8	964.4	936.5	895.3
15°	1002.3	1003.7	1015.7	1029.1	1033.5	*1030.1*	1028.2	1014.7	987.4	956.7	912.6
17.5°	1017.6	1019.1	1038.3	1058.4	1063.7	*1059.8*	1056.0	1042.6	1013.3	979.7	932.2
20°	1040.2	1044.0	1068.5	1094.4	1099.2	*1094.4*	1086.7	1068.0	1038.7	1004.7	950.9
22.5°	1081.4	1083.8	1110.2	1137.6	1140.0	*1132.3*	1120.8	1094.9	1064.2	1031.1	972.0
25°	1136.1	1139.5	1165.9	1192.3	1186.0	*1174.5*	1158.7	1129.4	1094.4	1062.2	998.9
27.5°	1201.4	1205.2	1231.1	1254.2	1237.8	*1224.4*	1206.7	1170.2	1134.7	1105.4	1033.5
30°	1271.9	1275.3	1298.3	1318.9	1297.3	*1281.5*	1260.4	1223.0	1187.0	1164.9	1082.4
32.5°	1340.0	1339.6	1361.6	1378.4	1356.4	*1343.9*	1324.7	1286.8	1258.0	1248.4	1155.3
35°	1403.4	1403.4	1421.6	1438.4	1422.6	*1415.8*	1398.1	1367.9	1351.6	1363.1	1252.7
37.5°	1467.2	1463.8	1481.1	1499.8	1498.4	*1498.8*	1488.8	1474.4	1475.3	1516.1	1386.6
40°	1520.0	1518.5	1538.7	1563.1	1582.3	*1597.7*	1591.4	1596.7	1627.0	1703.2	1557.9
42.5°	1562.2	1565.5	1591.4	1630.3	1678.8	*1710.0*	1714.3	1735.9	1813.6	1931.6	1751.2
45°	1610.6	1611.1	1647.1	1706.6	1783.8	*1833.3*	1850.5	1906.2	2016.5	2168.6	1963.3
47.5°	1670.1	1664.4	1704.7	1788.2	1899.9	*1972.9*	2003.6	2073.2	2244.0	2399.9	2136.0
50°	1735.9	1725.3	1770.9	1884.6	2030.0	*2121.1*	2183.5	2285.2	2469.5	2589.9	2264.6
52.5°	1812.1	1802.1	1853.9	1995.4	2185.9	*2296.7*	2376.9	2479.5	2662.8	2734.8	2341.4
55°	1909.1	1899.0	1953.7	2128.3	2370.1	*2514.1*	2598.0	2684.4	2842.7	2841.8	2397.0
57.5°	2016.5	2002.6	2078.4	2296.3	2600.0	*2749.6*	2835.0	2877.3	2979.5	2924.8	2434.4
60°	2139.8	2127.4	2232.4	2496.3	2865.3	*3003.9*	3057.7	3040.4	3091.7	2973.7	2421.5
62.5°	2251.2	2245.4	2375.9	2708.4	3118.1	*3235.2*	3250.1	3174.7	3174.3	2974.7	2334.2
65°	2366.8	2377.8	2571.6	2952.6	3372.4	*3451.1*	3425.7	3308.1	3207.4	2857.1	2076.0
67.5°	2410.0	2442.1	2700.7	3173.3	3573.0	*3634.4*	3589.8	3374.8	3069.7	2461.8	1580.9
70°	*2143.2*	*2203.7*	*2578.8*	*3185.8*	*3656.0*	*3714.5*	*3607.5*	*3195.4*	*2559.2*	*1630.8*	*866.0*
72.5°	1629.8	1700.4	2149.0	2608.6	3288.0	*3421.3*	3238.5	2603.3	1649.5	714.4	290.7
75°	912.1	988.4	1600.6	1964.2	2207.5	*2329.4*	2262.2	1670.1	730.7	186.6	86.8
77.5°	308.5	333.9	744.6	1215.3	1457.1	*1347.7*	1140.9	829.5	268.7	71.0	46.1
80°	182.8	192.4	277.3	605.0	766.7	*635.7*	501.9	306.6	136.7	37.9	32.1
82.5°	54.7	64.8	153.1	224.5	300.3	*187.1*	158.3	175.1	71.0	20.6	26.9
85°	0.0	0.0	32.6	69.6	78.7	*30.7*	30.7	99.3	13.0	8.6	19.7
87.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.5	2.4	1.4	1.9	4.3
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: P631547
CATALOG NUMBER: GWS-SA1F-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	894.8	894.8	894.8	894.8	894.8	894.8	894.8	894.8	894.8	894.8	894.8
2.5°	889.0	872.2	852.6	833.9	816.1	793.1	782.0	768.6	757.1	750.9	754.2
5°	871.3	844.9	804.6	763.8	722.6	683.7	648.7	625.2	604.0	593.0	595.4
7.5°	855.9	820.4	757.6	690.9	624.7	558.0	503.8	461.6	428.9	415.5	413.1
10°	849.2	804.6	715.8	619.9	518.2	428.4	351.7	305.1	272.0	255.7	258.6
12.5°	852.6	796.4	680.3	550.3	418.4	313.8	240.4	196.7	173.2	163.6	161.2
15°	862.2	794.5	648.7	479.3	322.9	219.3	166.0	148.3	143.5	142.5	142.5
17.5°	873.2	795.0	616.0	407.3	245.2	162.6	142.0	138.7	137.2	136.3	136.7
20°	884.2	795.0	578.6	334.4	184.2	140.6	135.3	132.9	131.5	131.0	131.0
22.5°	897.7	795.0	536.9	266.8	147.8	133.4	129.1	127.6	126.2	125.7	125.2
25°	914.0	795.5	490.8	208.7	134.3	127.1	123.8	122.3	120.9	119.9	119.9
27.5°	937.5	799.3	440.0	162.6	126.7	121.4	118.5	117.1	115.6	114.2	114.2
30°	971.6	808.9	382.9	134.3	119.5	115.1	112.3	111.3	109.9	108.4	108.0
32.5°	1022.4	825.7	323.9	120.4	112.7	108.4	105.1	104.1	102.7	101.2	100.8
35°	1093.4	856.4	266.3	111.8	104.1	99.8	97.9	97.4	95.5	94.0	94.0
37.5°	1197.5	906.3	211.1	103.2	96.9	93.6	91.2	90.2	88.3	86.8	86.4
40°	1324.7	971.1	164.1	96.4	90.2	86.8	84.4	83.0	80.6	78.7	77.7
42.5°	1486.9	1050.2	129.5	89.2	84.0	80.6	78.7	75.8	72.4	69.6	69.1
45°	1655.7	1131.8	107.0	82.5	78.2	75.3	72.9	69.1	64.3	60.9	60.0
47.5°	1785.3	1182.7	93.6	75.3	72.0	69.6	66.7	61.9	56.1	52.3	51.3
50°	1877.9	1190.3	83.5	68.6	66.7	64.3	60.0	54.2	48.0	44.1	43.2
52.5°	1923.5	1155.8	75.3	62.4	60.9	58.5	53.3	47.0	40.3	36.5	35.5
55°	1944.1	1090.6	67.6	57.1	55.2	52.3	46.5	39.8	33.1	29.7	28.8
57.5°	1935.9	994.1	60.9	51.8	49.4	46.1	39.8	32.6	27.3	24.0	23.5
60°	1875.5	858.8	54.2	46.5	43.7	39.8	33.6	26.9	22.1	19.7	19.2
62.5°	1745.0	690.9	47.5	40.3	38.4	34.5	28.8	22.1	18.2	16.8	16.3
65°	1477.7	488.4	40.8	34.1	33.1	29.3	24.0	18.2	15.8	14.9	14.4
67.5°	1062.2	297.0	34.5	29.3	28.3	24.9	20.2	15.8	14.4	13.9	13.9
70°	*534.0*	*140.6*	*27.3*	*24.0*	*24.0*	*20.6*	*17.3*	*14.4*	*13.9*	*13.4*	*13.4*
72.5°	181.4	60.0	20.6	18.7	19.7	17.8	14.9	13.4	13.4	13.4	13.4
75°	61.9	31.7	14.4	13.4	14.4	14.4	13.0	13.0	13.4	13.4	13.4
77.5°	40.3	21.1	10.1	9.1	11.0	11.0	11.0	12.0	13.0	13.0	13.0
80°	33.1	11.5	6.7	6.2	8.2	8.2	9.1	11.0	12.0	12.0	12.0
82.5°	28.3	7.2	3.8	4.3	5.8	6.2	7.7	9.1	10.6	11.0	11.0
85°	19.2	3.8	2.9	3.4	3.8	4.8	6.2	7.7	8.6	9.6	9.6
87.5°	5.3	1.4	1.9	2.4	2.4	3.4	4.8	5.8	6.7	7.2	7.2
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

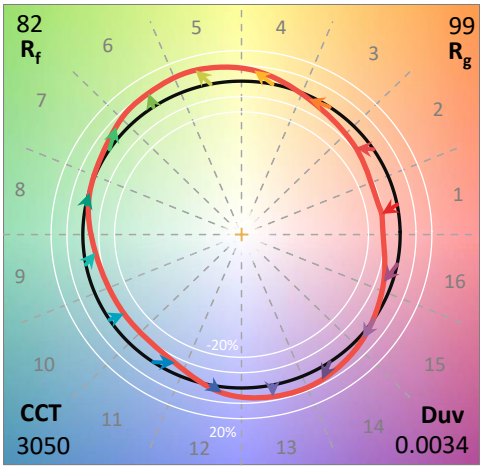
Test Information

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

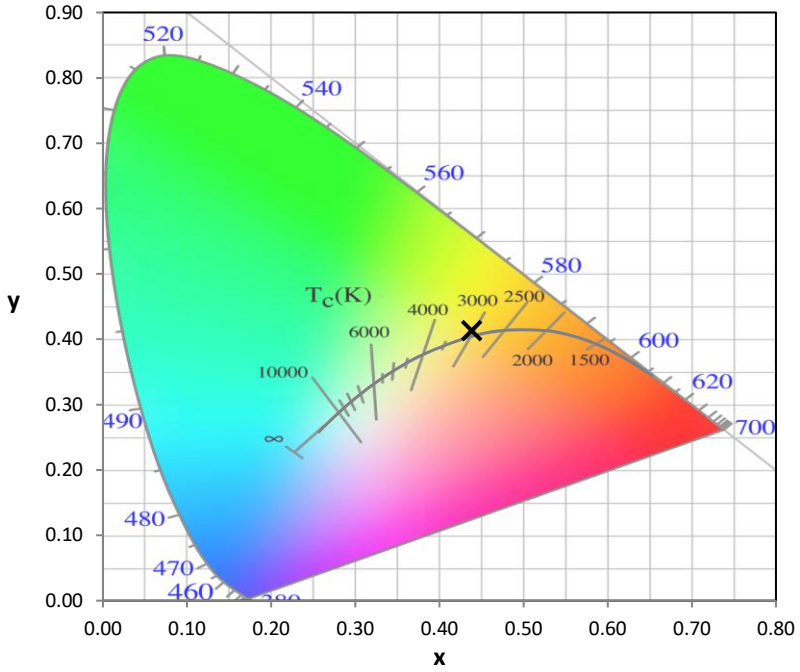
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

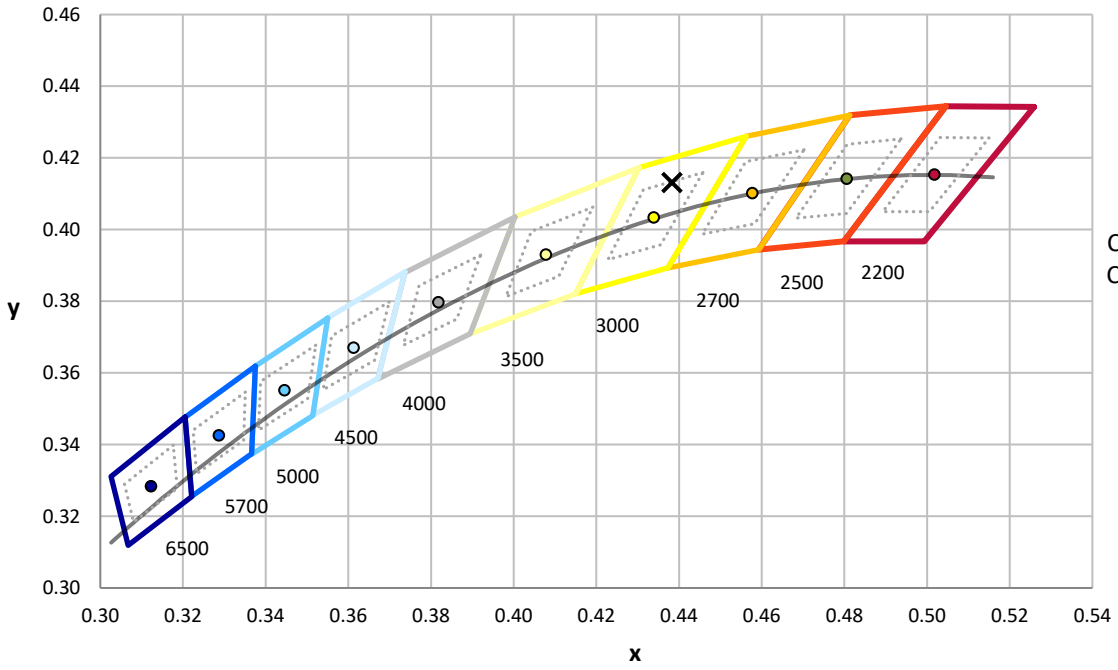
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

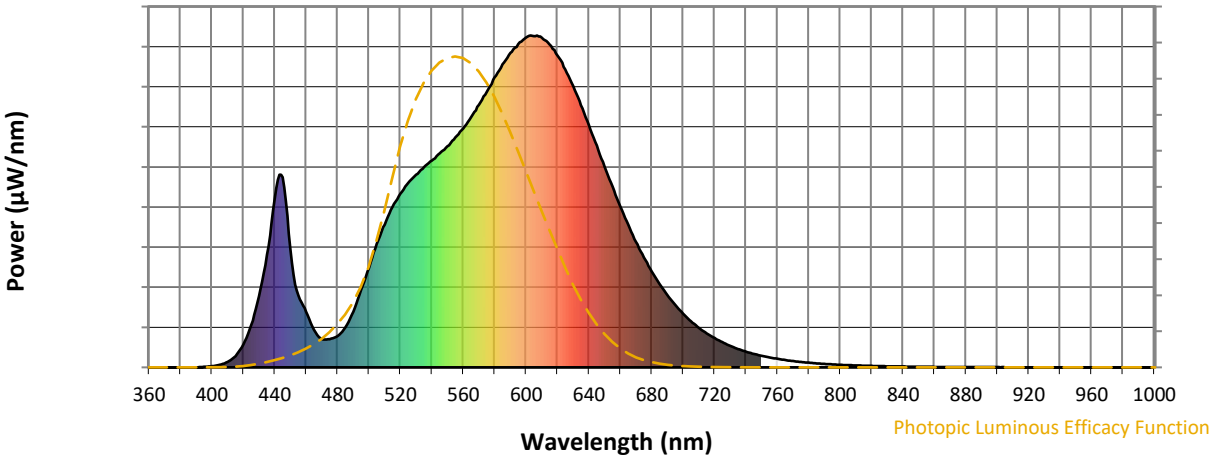


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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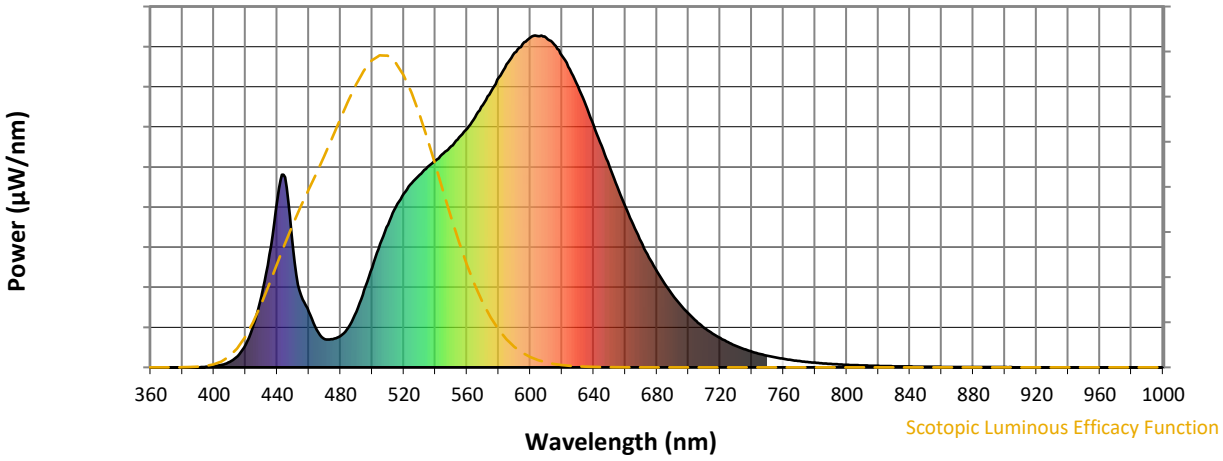
Scotopic Flux vs. Wavelength



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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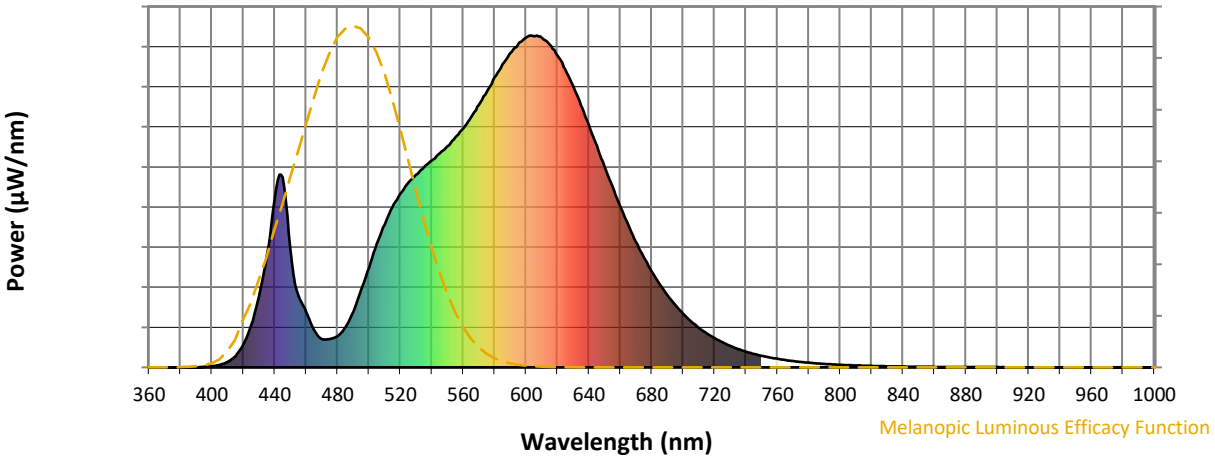
Melanopic Flux vs. Wavelength



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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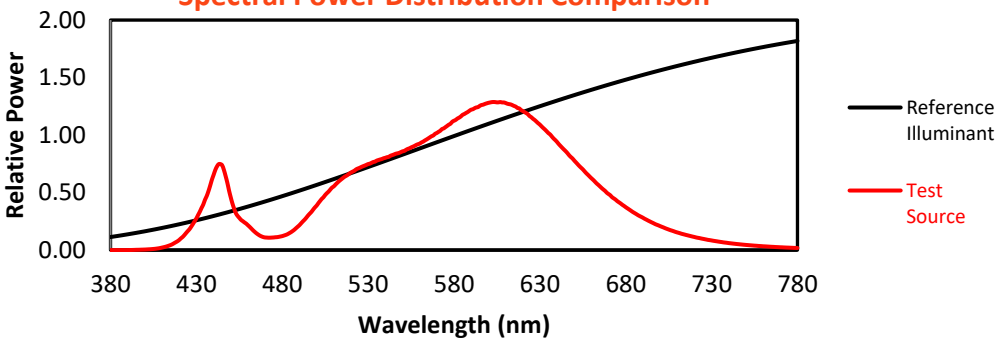
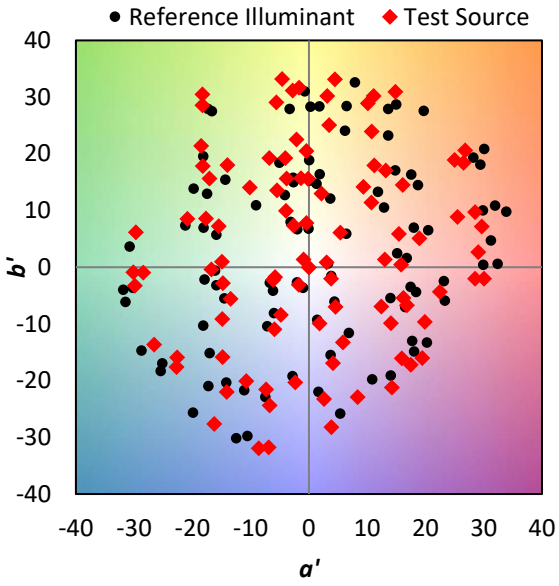
Summary

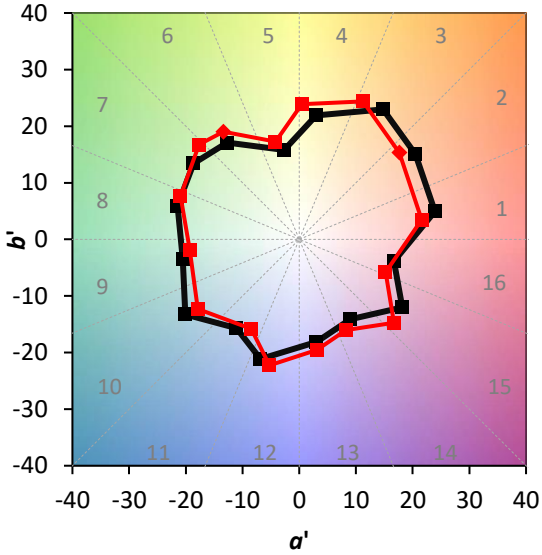
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

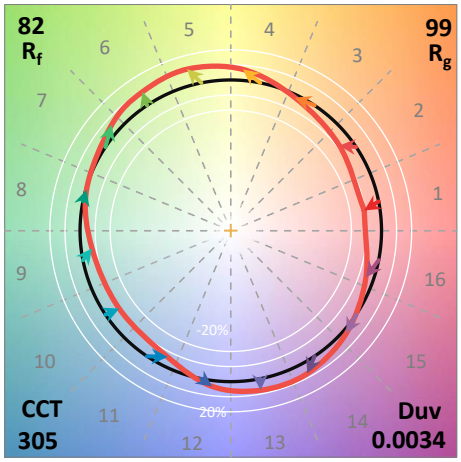
Spectral Power Distribution Comparison

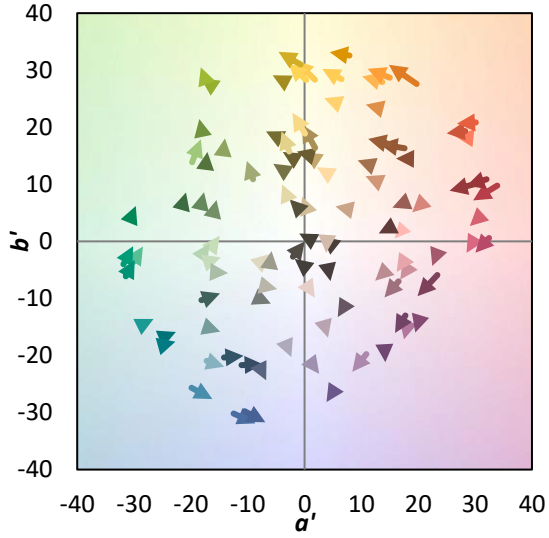


Color Vector Graphics









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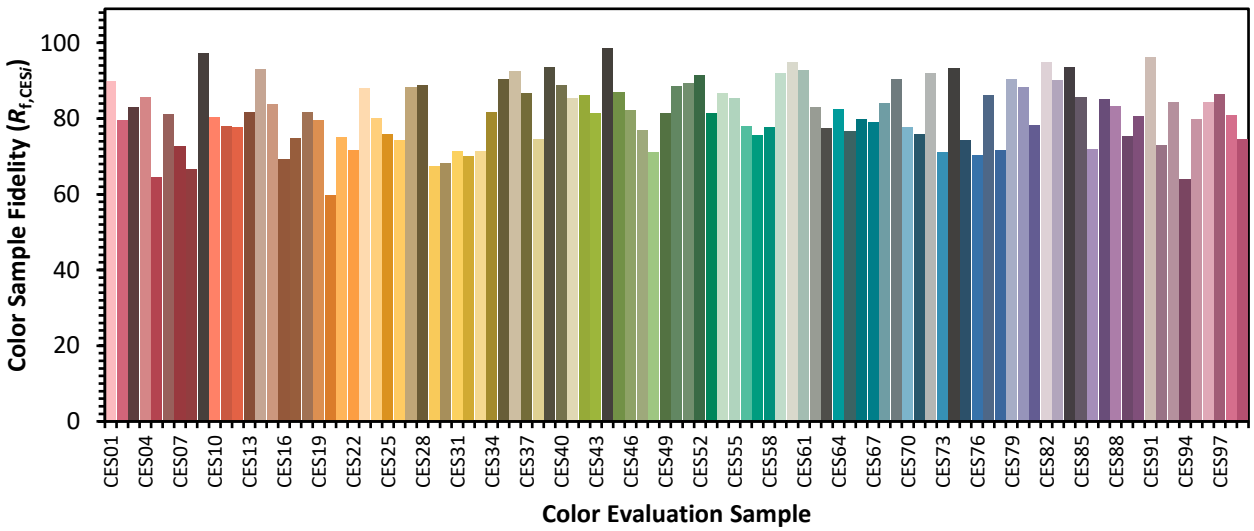
Individual Sample Fidelity Index ($R_{f,i}$)

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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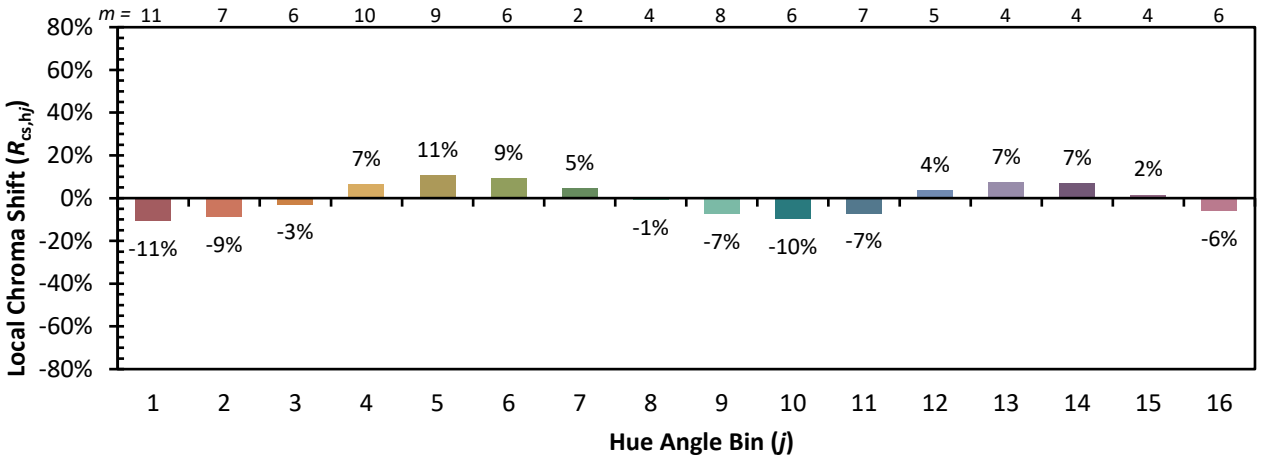
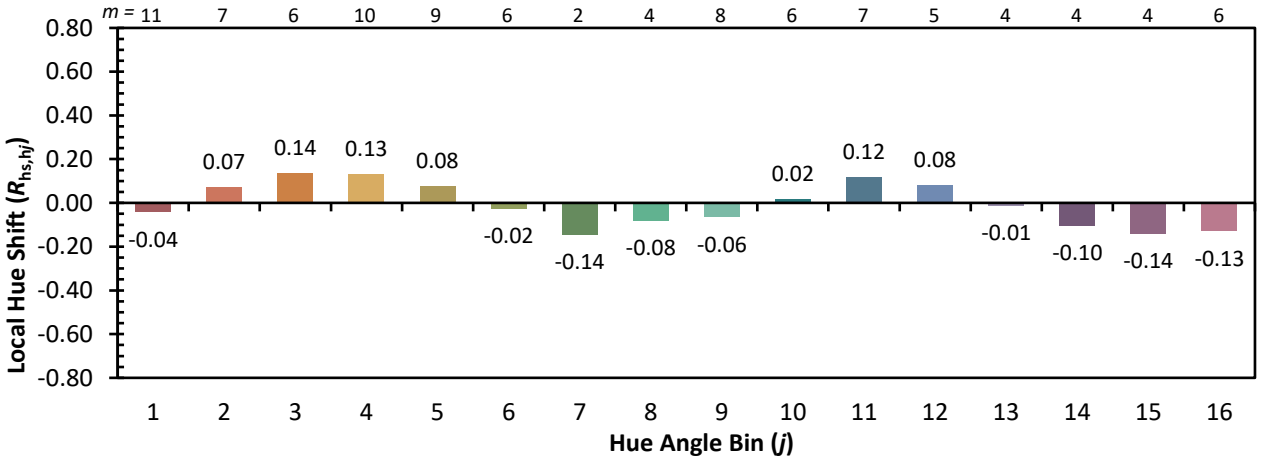
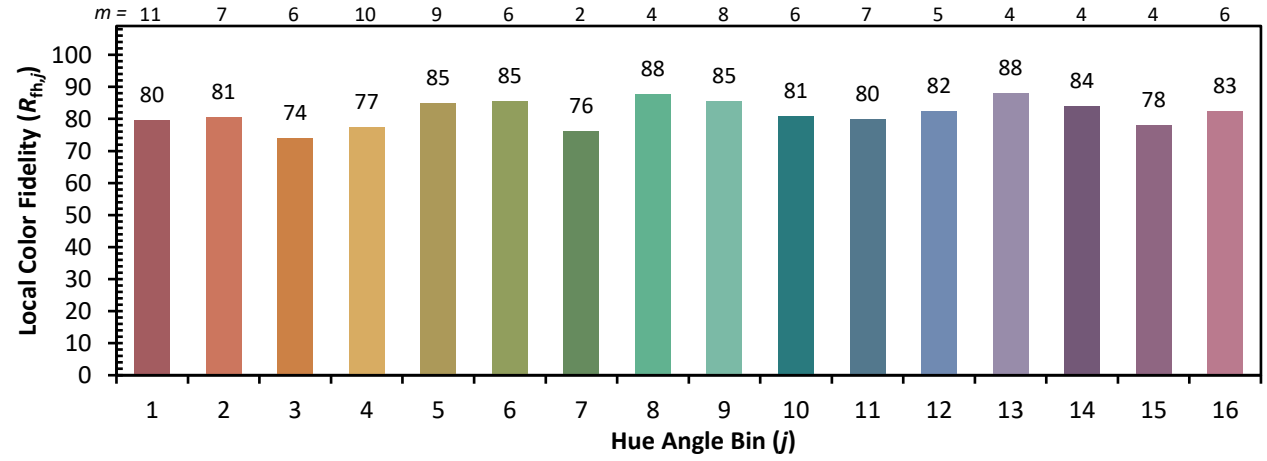
Color Rendition by Hue-Angle Bin







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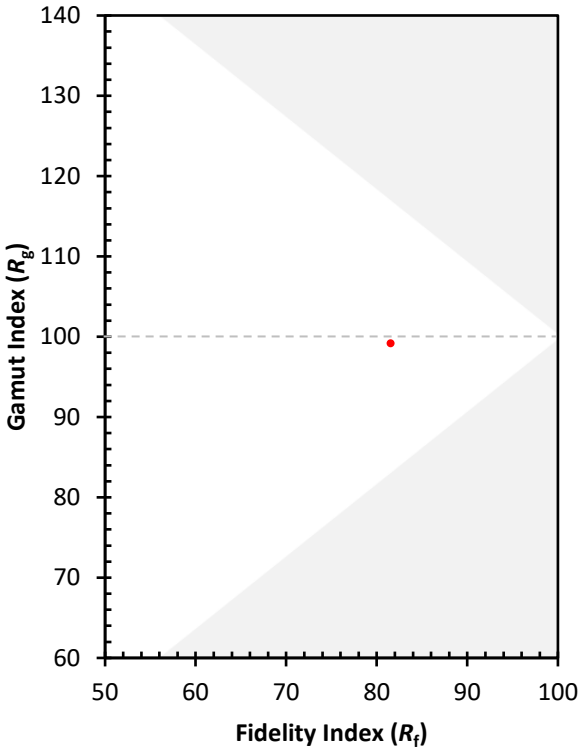
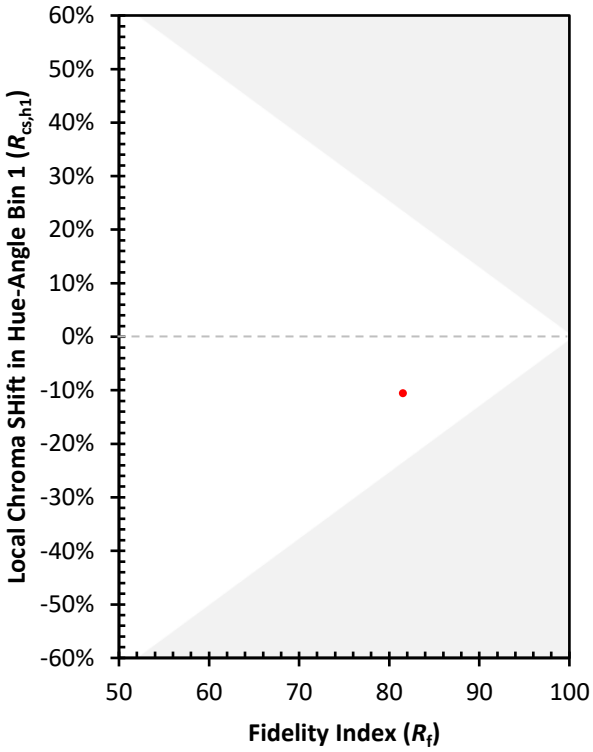
Measure Comparisons





(END OF REPORT)