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: P631052

Luminaire Tested: GWS-SA1E-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:	P631052
	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-SA1E-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:	4742.9 lumens
Efficiency:	N/A
Efficacy:	81.2 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):	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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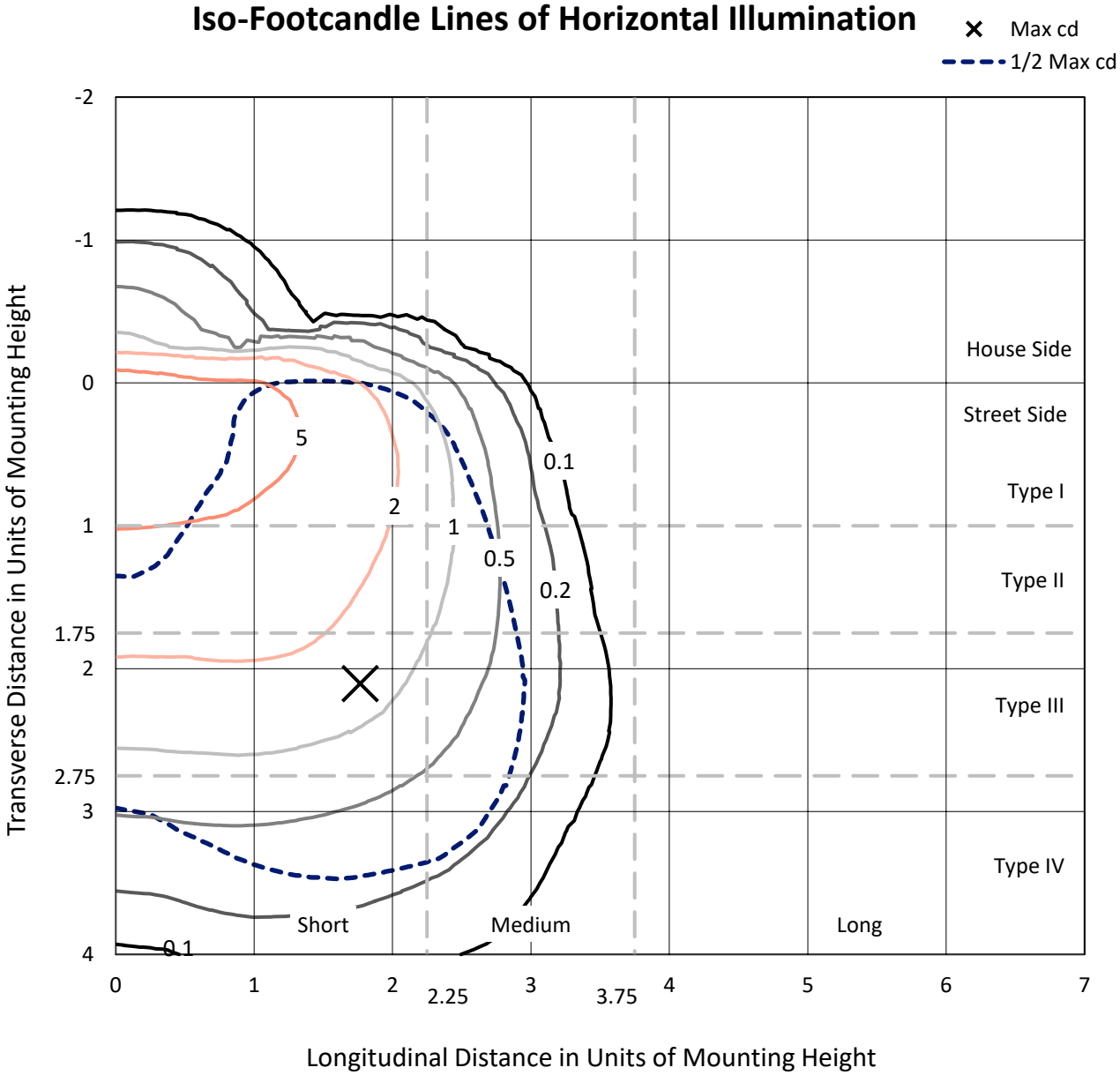
REPORT NUMBER: P631052
CATALOG NUMBER: GWS-SA1E-830-U-SL4-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 8.8 fc
Type IV - Short - N/A

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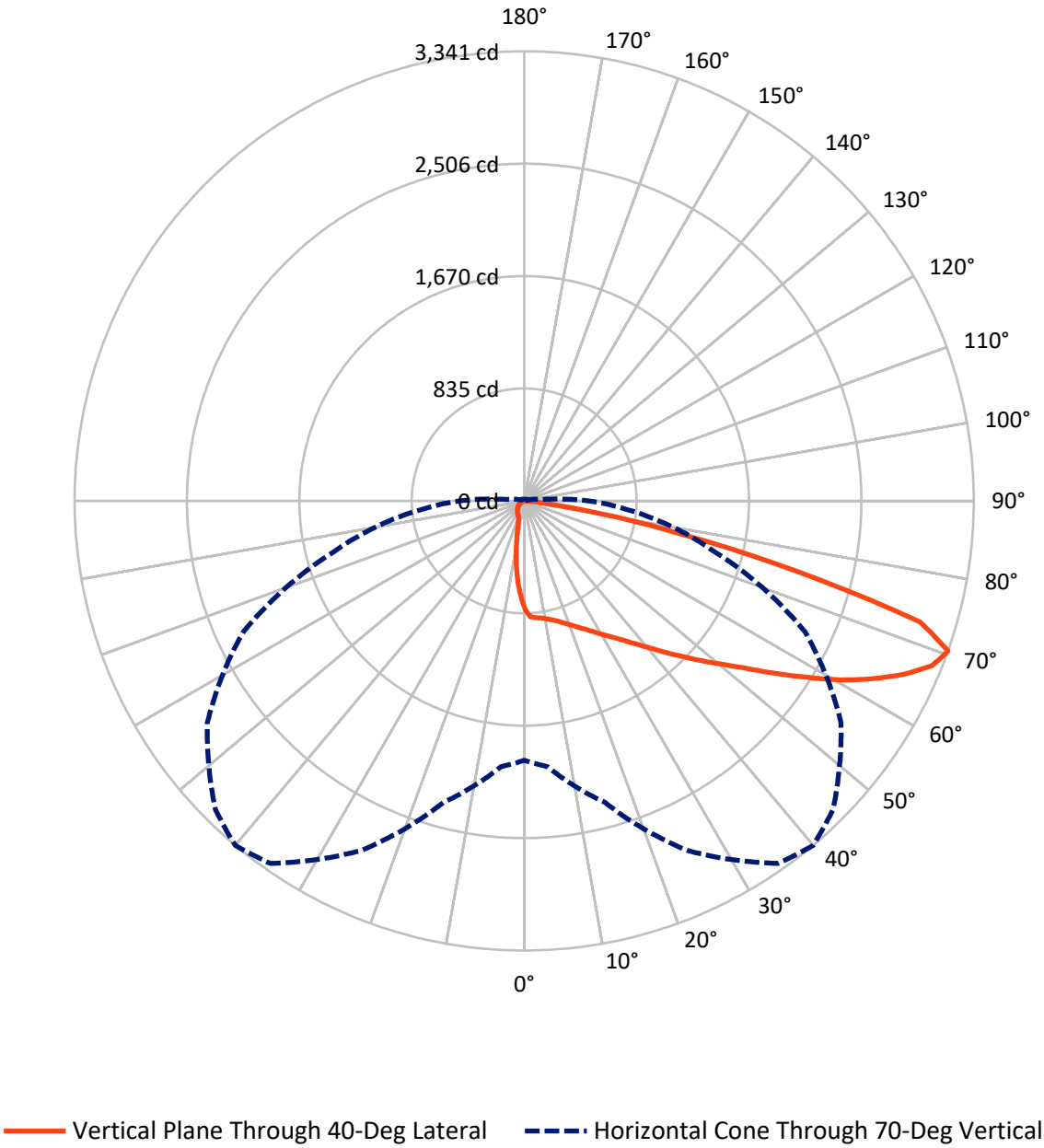
Luminous Intensity Polar Plot



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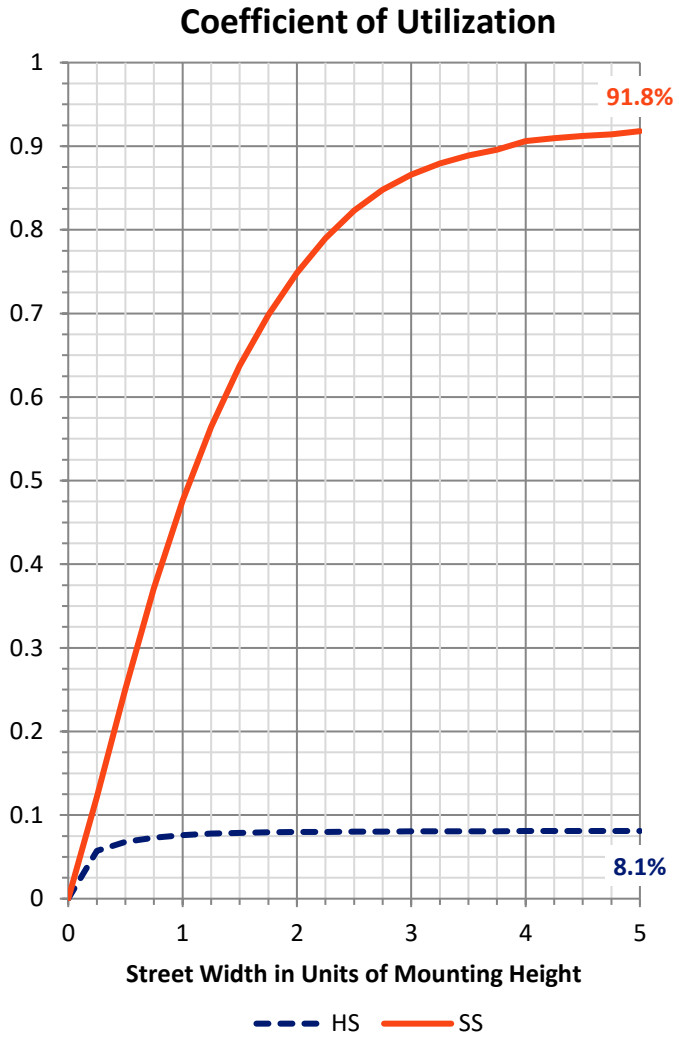
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	387.8	0.0	387.8
	% Fixture	8.2	0.0	8.2
Street Side	Lumens	4355.1	0.0	4355.1
	% Fixture	91.8	0.0	91.8
Total	Lumens	4742.9	0.0	4742.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	1.4
10°-20°	172.5	3.6
20°-30°	288.7	6.1
30°-40°	453.5	9.6
40°-50°	717.3	15.1
50°-60°	1046.4	22.1
60°-70°	1297.2	27.4
70°-80°	656.3	13.8
80°-90°	42.9	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°	4742.9	100.0
0°-180°	4742.9	100.0



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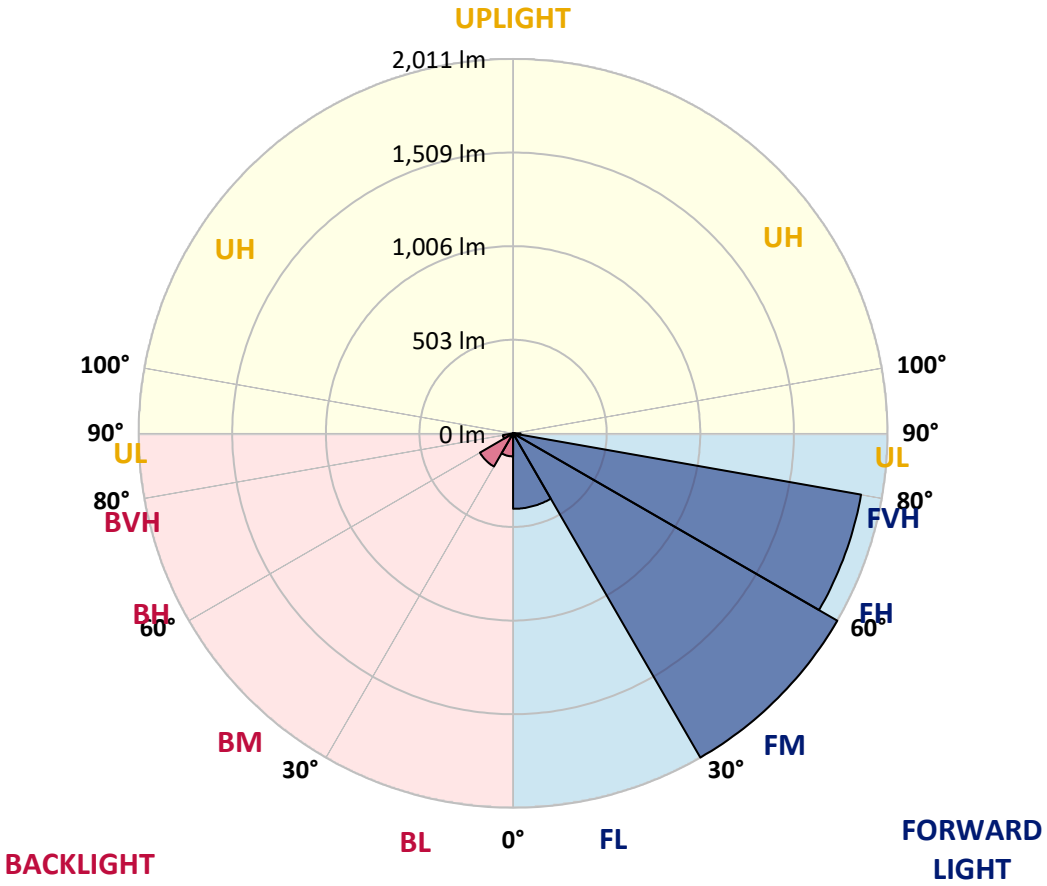
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	405.4	8.5			
FM	(30°-60°)	2011.4	42.4			
FH	(60°-80°)	1898.2	40.0			G2/5000
FVH	(80°-90°)	40.0	0.8			G1/100
BL	(0°-30°)	123.9	2.6	B1/500		
BM	(30°-60°)	205.9	4.3	B0/220		
BH	(60°-80°)	55.3	1.2	B0/110		G0/110
BVH	(80°-90°)	2.8	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-G2
Type IV Short



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REPORT NUMBER: P631052
CATALOG NUMBER: GWS-SA1E-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	804.8	804.8	804.8	804.8	804.8	*804.8*	804.8	804.8	804.8	804.8	804.8
2.5°	865.2	868.2	867.8	869.1	866.1	*861.3*	860.5	854.0	842.4	827.7	811.3
5°	882.9	886.4	883.8	882.5	876.9	*871.7*	870.4	863.5	850.1	830.3	801.8
7.5°	898.0	898.9	897.2	894.1	885.9	*879.0*	874.3	864.8	848.8	829.0	796.2
10°	900.6	900.2	901.0	901.5	896.3	*890.3*	886.4	873.4	853.1	832.0	796.6
12.5°	897.6	897.6	903.2	909.7	909.7	*906.7*	902.8	891.1	867.4	842.4	805.2
15°	901.5	902.8	913.6	925.6	929.5	*926.5*	924.8	912.7	888.1	860.5	820.8
17.5°	915.3	916.6	933.8	952.0	956.7	*953.3*	949.8	937.7	911.4	881.2	838.5
20°	935.6	939.0	961.0	984.3	988.6	*984.3*	977.4	960.6	934.3	903.6	855.3
22.5°	972.7	974.8	998.6	1023.2	1025.3	*1018.4*	1008.1	984.8	957.1	927.4	874.3
25°	1021.9	1024.9	1048.6	1072.4	1066.8	*1056.4*	1042.2	1015.8	984.3	955.4	898.5
27.5°	1080.6	1084.0	1107.3	1128.0	1113.4	*1101.3*	1085.3	1052.5	1020.6	994.3	929.5
30°	1144.0	1147.0	1167.7	1186.3	1166.9	*1152.6*	1133.6	1100.0	1067.6	1047.8	973.5
32.5°	1205.3	1204.8	1224.7	1239.8	1220.0	*1208.7*	1191.5	1157.4	1131.5	1122.9	1039.1
35°	1262.2	1262.2	1278.6	1293.7	1279.5	*1273.5*	1257.5	1230.3	1215.6	1226.0	1126.7
37.5°	1319.6	1316.6	1332.1	1349.0	1347.7	*1348.1*	1339.1	1326.1	1327.0	1363.7	1247.1
40°	1367.1	1365.8	1383.9	1405.9	1423.2	*1437.0*	1431.4	1436.1	1463.3	1532.0	1401.2
42.5°	1405.1	1408.1	1431.4	1466.4	1509.9	*1538.0*	1541.9	1561.3	1631.2	1737.4	1575.1
45°	1448.7	1449.1	1481.5	1535.0	1604.4	*1648.9*	1664.4	1714.5	1813.7	1950.5	1765.8
47.5°	1502.2	1497.0	1533.2	1608.3	1708.9	*1774.5*	1802.1	1864.7	2018.3	2158.5	1921.2
50°	1561.3	1551.8	1592.8	1695.1	1825.8	*1907.8*	1963.9	2055.4	2221.1	2329.4	2036.8
52.5°	1629.9	1620.8	1667.5	1794.8	1966.1	*2065.8*	2137.8	2230.2	2395.0	2459.8	2105.9
55°	1717.1	1708.0	1757.2	1914.3	2131.8	*2261.2*	2336.8	2414.4	2556.8	2556.0	2156.0
57.5°	1813.7	1801.2	1869.4	2065.3	2338.5	*2473.1*	2549.9	2587.9	2679.8	2630.6	2189.6
60°	1924.6	1913.4	2007.9	2245.3	2577.1	*2701.8*	2750.2	2734.6	2780.8	2674.7	2178.0
62.5°	2024.8	2019.6	2137.0	2436.0	2804.5	*2909.8*	2923.2	2855.5	2855.0	2675.5	2099.4
65°	2128.8	2138.7	2313.0	2655.7	3033.3	*3104.0*	3081.2	2975.4	2884.8	2569.8	1867.3
67.5°	2167.6	2196.5	2429.1	2854.2	3213.6	*3268.9*	3228.7	3035.4	2761.0	2214.2	1421.9
70°	*1927.7*	*1982.0*	*2319.5*	*2865.4*	*3288.3*	*3340.9*	*3244.7*	*2874.0*	*2301.8*	*1466.8*	*778.9*
72.5°	1465.9	1529.4	1932.8	2346.3	2957.3	*3077.3*	2912.9	2341.5	1483.6	642.6	261.5
75°	820.3	889.0	1439.6	1766.7	1985.5	*2095.1*	2034.7	1502.2	657.2	167.9	78.1
77.5°	277.5	300.3	669.7	1093.1	1310.6	*1212.2*	1026.2	746.1	241.7	63.9	41.4
80°	164.4	173.0	249.4	544.2	689.6	*571.8*	451.4	275.8	123.0	34.1	28.9
82.5°	49.2	58.3	137.7	202.0	270.1	*168.3*	142.4	157.5	63.9	18.6	24.2
85°	0.0	0.0	29.3	62.6	70.8	*27.6*	27.6	89.3	11.7	7.8	17.7
87.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.4	2.2	1.3	1.7	3.9
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: P631052
CATALOG NUMBER: GWS-SA1E-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8
2.5°	799.6	784.5	766.8	750.0	734.0	713.3	703.4	691.3	681.0	675.4	678.4
5°	783.7	759.9	723.7	687.0	649.9	614.9	583.4	562.3	543.3	533.4	535.5
7.5°	769.9	737.9	681.4	621.4	561.9	501.9	453.1	415.1	385.8	373.7	371.6
10°	763.8	723.7	643.9	557.5	466.1	385.4	316.3	274.5	244.7	230.0	232.6
12.5°	766.8	716.3	611.9	495.0	376.3	282.2	216.2	176.9	155.8	147.2	145.0
15°	775.5	714.6	583.4	431.1	290.4	197.2	149.3	133.3	129.0	128.2	128.2
17.5°	785.4	715.1	554.1	366.4	220.5	146.3	127.7	124.7	123.4	122.6	123.0
20°	795.3	715.1	520.4	300.8	165.7	126.4	121.7	119.5	118.2	117.8	117.8
22.5°	807.4	715.1	482.9	239.9	132.9	120.0	116.1	114.8	113.5	113.1	112.6
25°	822.1	715.5	441.5	187.7	120.8	114.4	111.3	110.0	108.7	107.9	107.9
27.5°	843.2	718.9	395.7	146.3	113.9	109.2	106.6	105.3	104.0	102.7	102.7
30°	873.9	727.6	344.4	120.8	107.5	103.6	101.0	100.1	98.8	97.5	97.1
32.5°	919.6	742.7	291.3	108.3	101.4	97.5	94.5	93.6	92.3	91.1	90.6
35°	983.5	770.3	239.5	100.5	93.6	89.8	88.0	87.6	85.9	84.6	84.6
37.5°	1077.1	815.2	189.9	92.8	87.2	84.1	82.0	81.1	79.4	78.1	77.7
40°	1191.5	873.4	147.6	86.7	81.1	78.1	76.0	74.7	72.5	70.8	69.9
42.5°	1337.3	944.6	116.5	80.3	75.5	72.5	70.8	68.2	65.2	62.6	62.1
45°	1489.2	1018.0	96.2	74.2	70.3	67.8	65.6	62.1	57.8	54.8	53.9
47.5°	1605.7	1063.7	84.1	67.8	64.7	62.6	60.0	55.7	50.5	47.0	46.2
50°	1689.0	1070.6	75.1	61.7	60.0	57.8	53.9	48.8	43.2	39.7	38.8
52.5°	1730.0	1039.6	67.8	56.1	54.8	52.6	47.9	42.3	36.2	32.8	31.9
55°	1748.6	980.9	60.8	51.4	49.6	47.0	41.9	35.8	29.8	26.8	25.9
57.5°	1741.2	894.1	54.8	46.6	44.4	41.4	35.8	29.3	24.6	21.6	21.1
60°	1686.9	772.4	48.8	41.9	39.3	35.8	30.2	24.2	19.9	17.7	17.3
62.5°	1569.5	621.4	42.7	36.2	34.5	31.1	25.9	19.9	16.4	15.1	14.7
65°	1329.1	439.3	36.7	30.6	29.8	26.3	21.6	16.4	14.2	13.4	12.9
67.5°	955.4	267.1	31.1	26.3	25.5	22.4	18.1	14.2	12.9	12.5	12.5
70°	*480.3*	*126.4*	*24.6*	*21.6*	*21.6*	*18.6*	*15.5*	*12.9*	*12.5*	*12.1*	*12.1*
72.5°	163.1	53.9	18.6	16.8	17.7	16.0	13.4	12.1	12.1	12.1	12.1
75°	55.7	28.5	12.9	12.1	12.9	12.9	11.7	11.7	12.1	12.1	12.1
77.5°	36.2	19.0	9.1	8.2	9.9	9.9	9.9	10.8	11.7	11.7	11.7
80°	29.8	10.4	6.0	5.6	7.3	7.3	8.2	9.9	10.8	10.8	10.8
82.5°	25.5	6.5	3.5	3.9	5.2	5.6	6.9	8.2	9.5	9.9	9.9
85°	17.3	3.5	2.6	3.0	3.5	4.3	5.6	6.9	7.8	8.6	8.6
87.5°	4.7	1.3	1.7	2.2	2.2	3.0	4.3	5.2	6.0	6.5	6.5
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

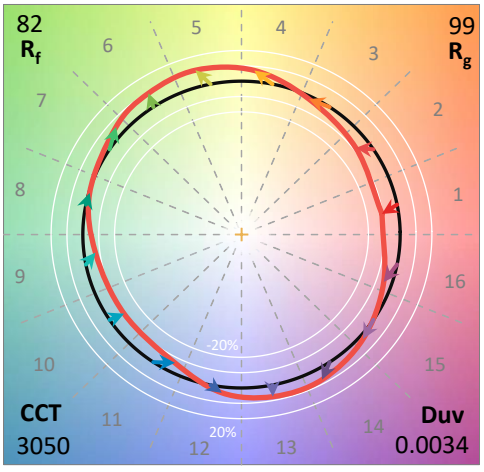
Test Information

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

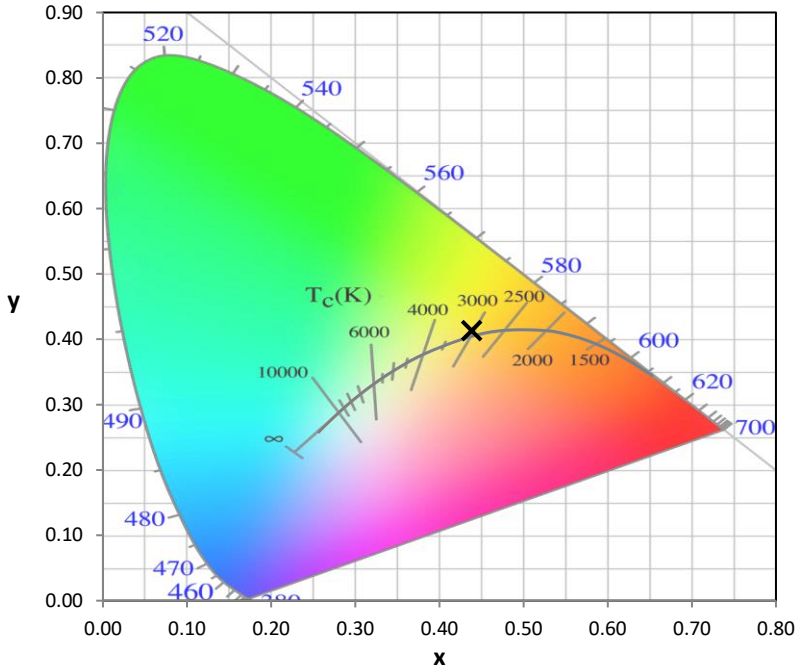
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

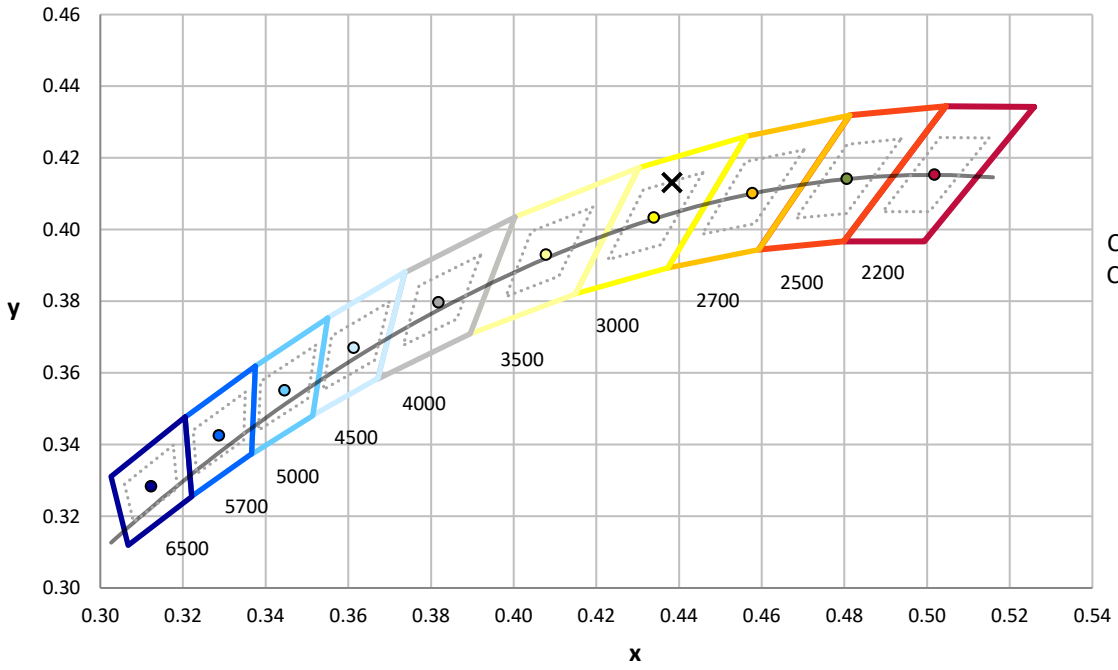
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

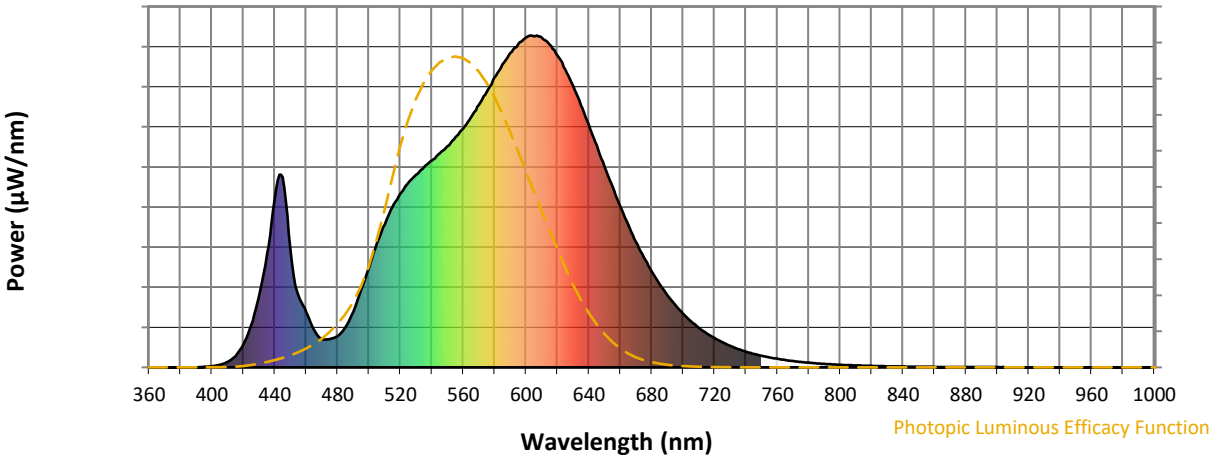


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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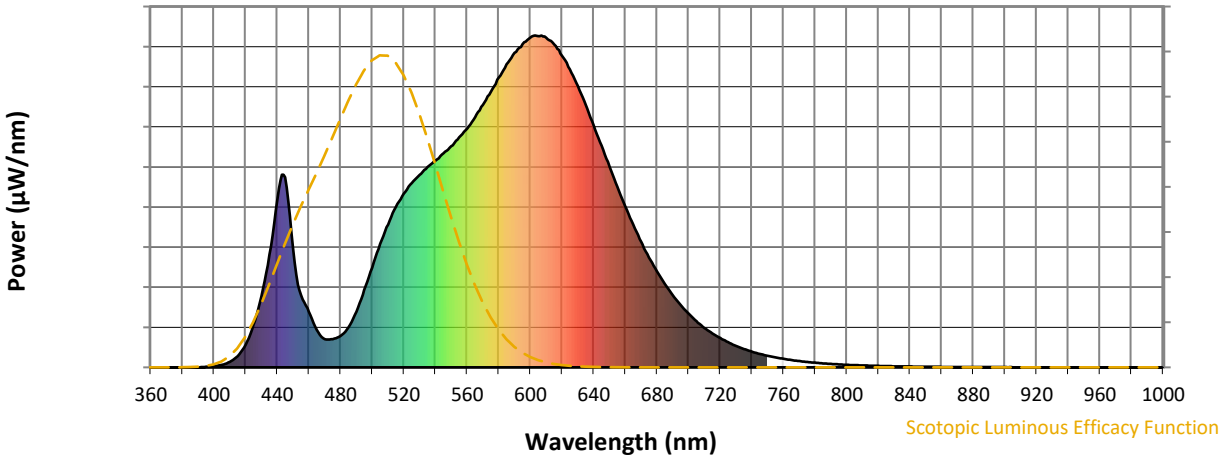
Scotopic Flux vs. Wavelength



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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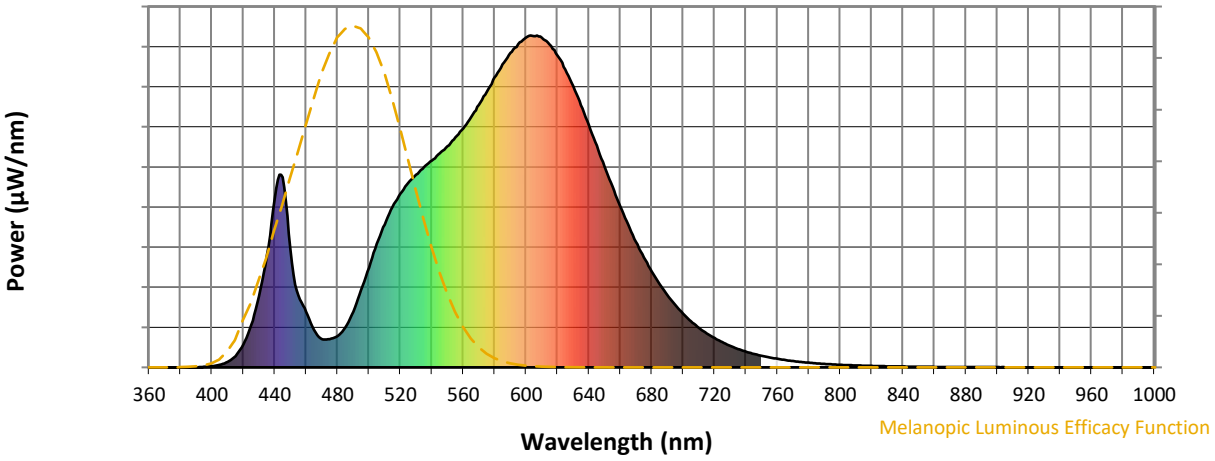
Melanopic Flux vs. Wavelength



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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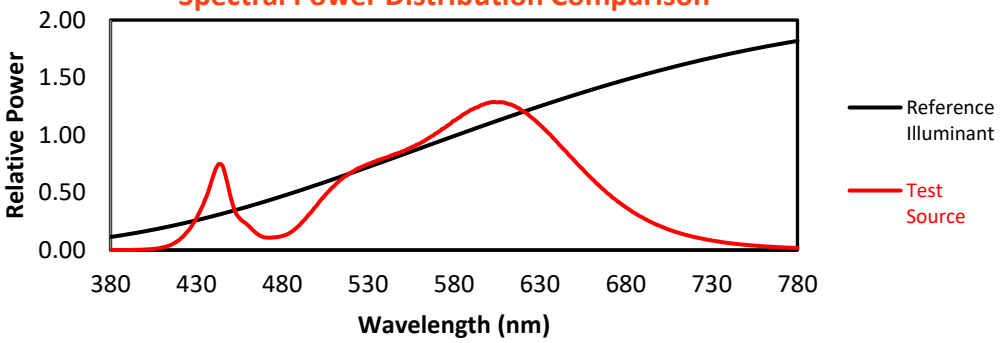
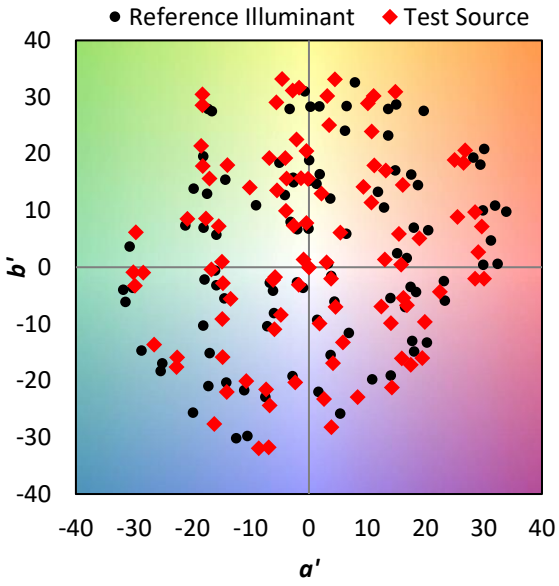
Summary

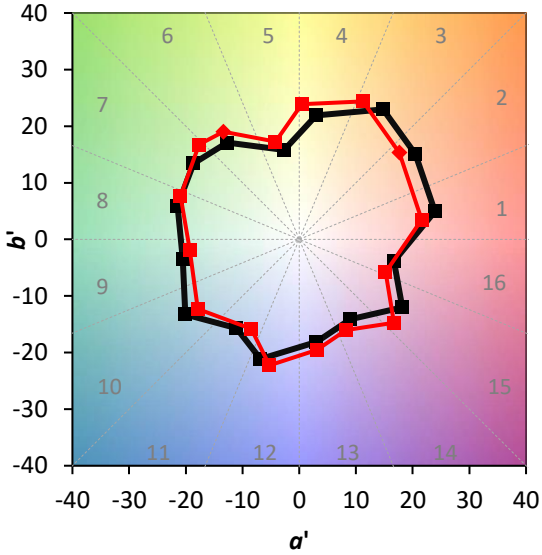
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

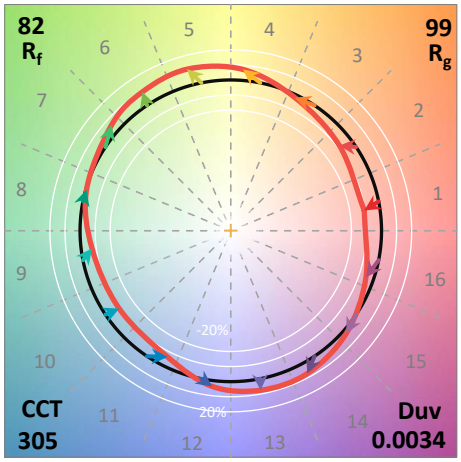
Spectral Power Distribution Comparison

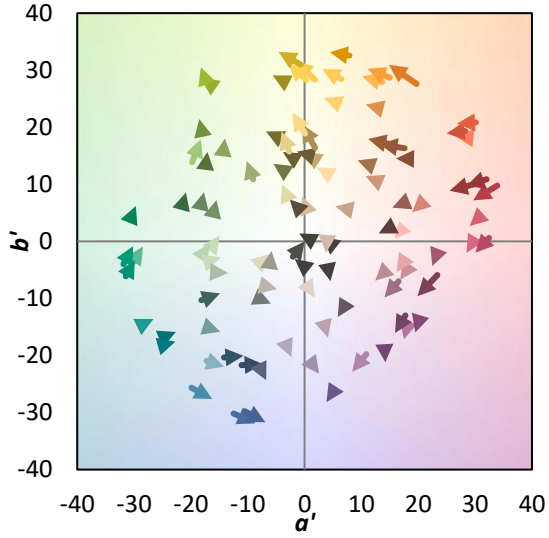


Color Vector Graphics









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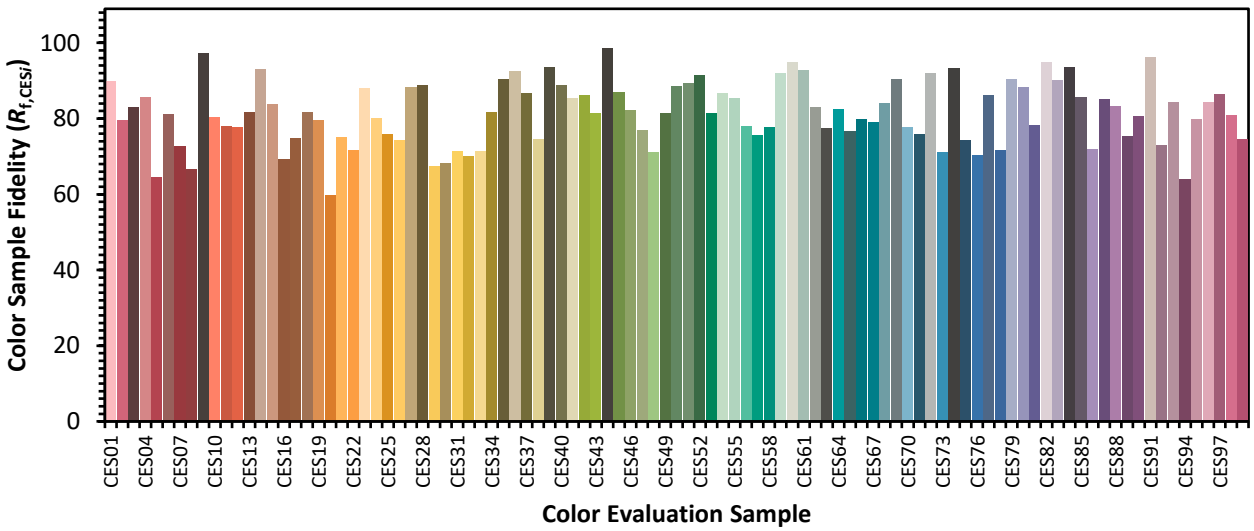
Individual Sample Fidelity Index ($R_{f,i}$)

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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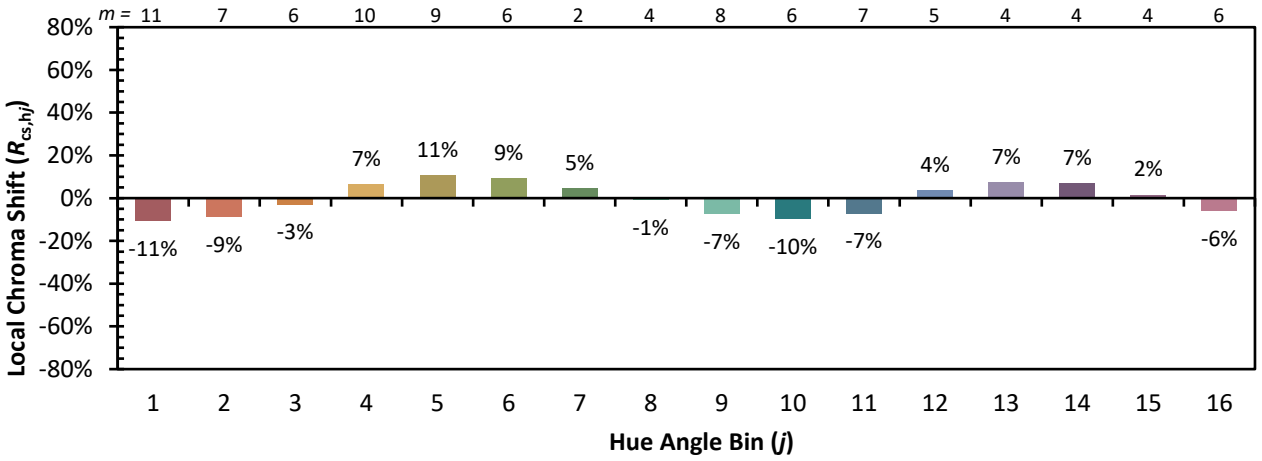
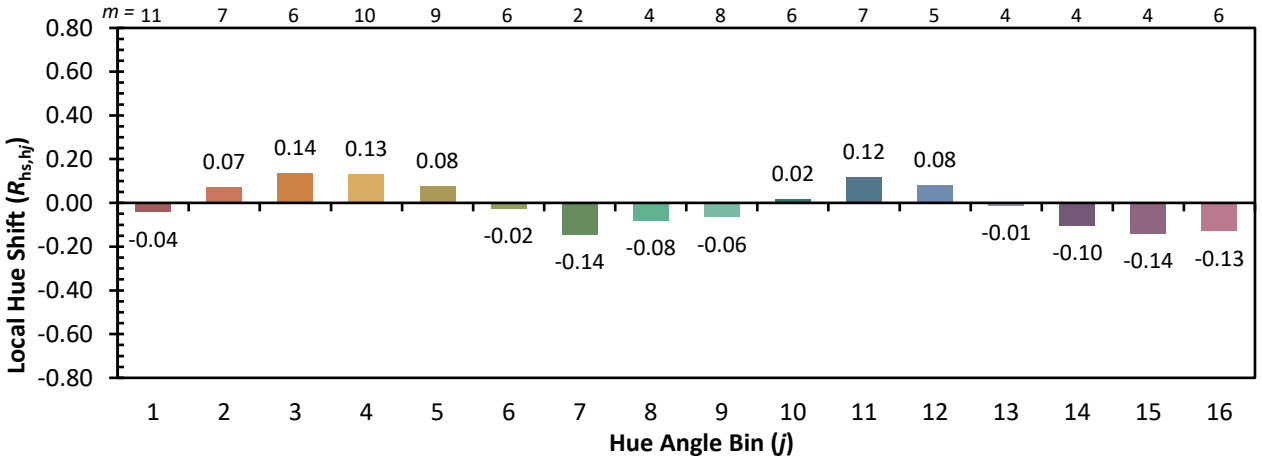
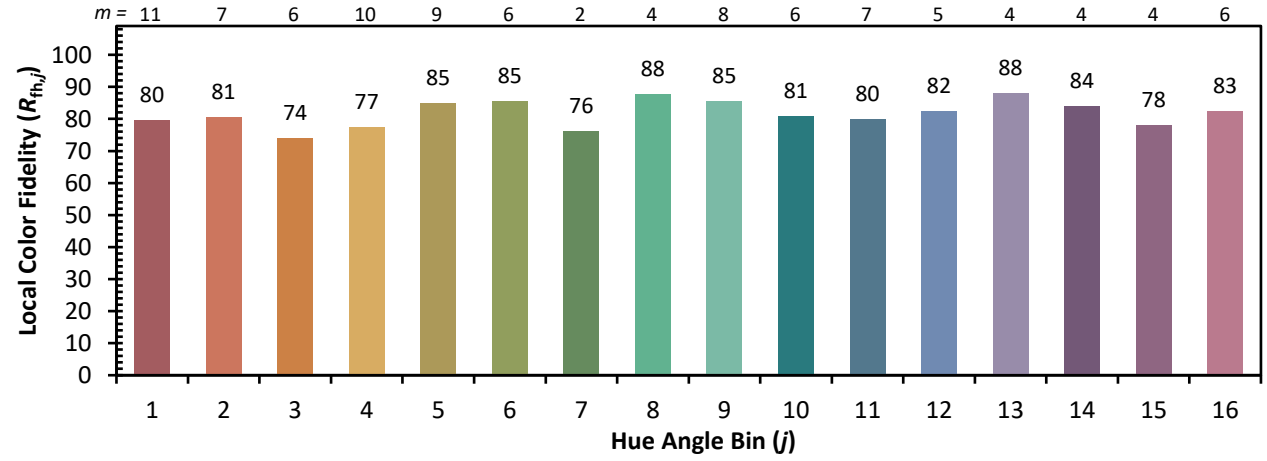
Color Rendition by Hue-Angle Bin







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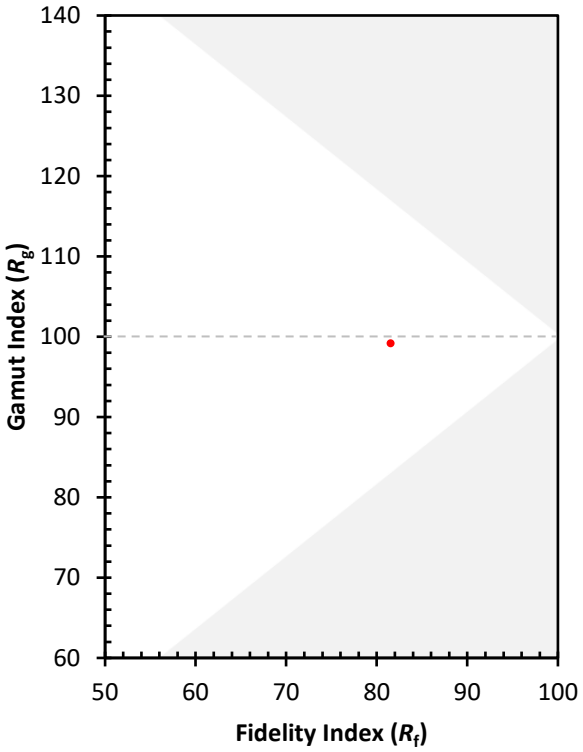
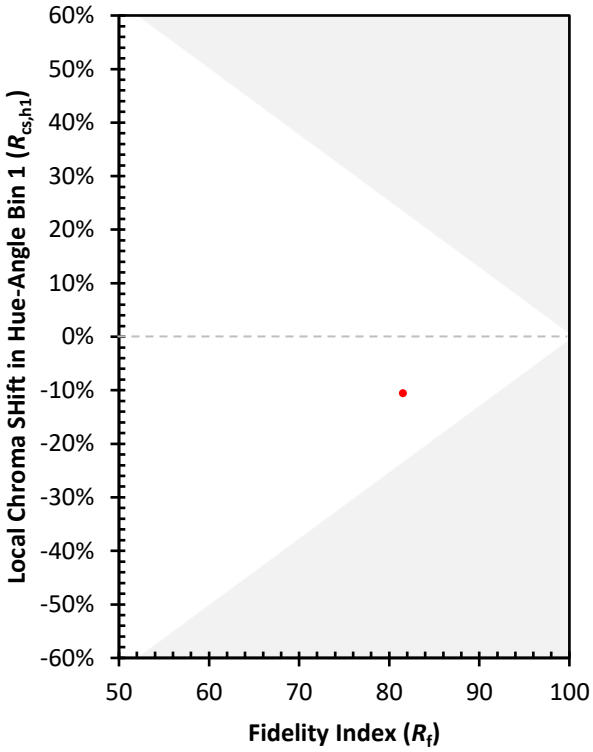
Measure Comparisons





(END OF REPORT)