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: P631046

Luminaire Tested: GWS-SA1E-830-U-SL2-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:	P631046
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-30)
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-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II 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:	4771.8 lumens
Efficiency:	N/A
Efficacy:	81.7 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):	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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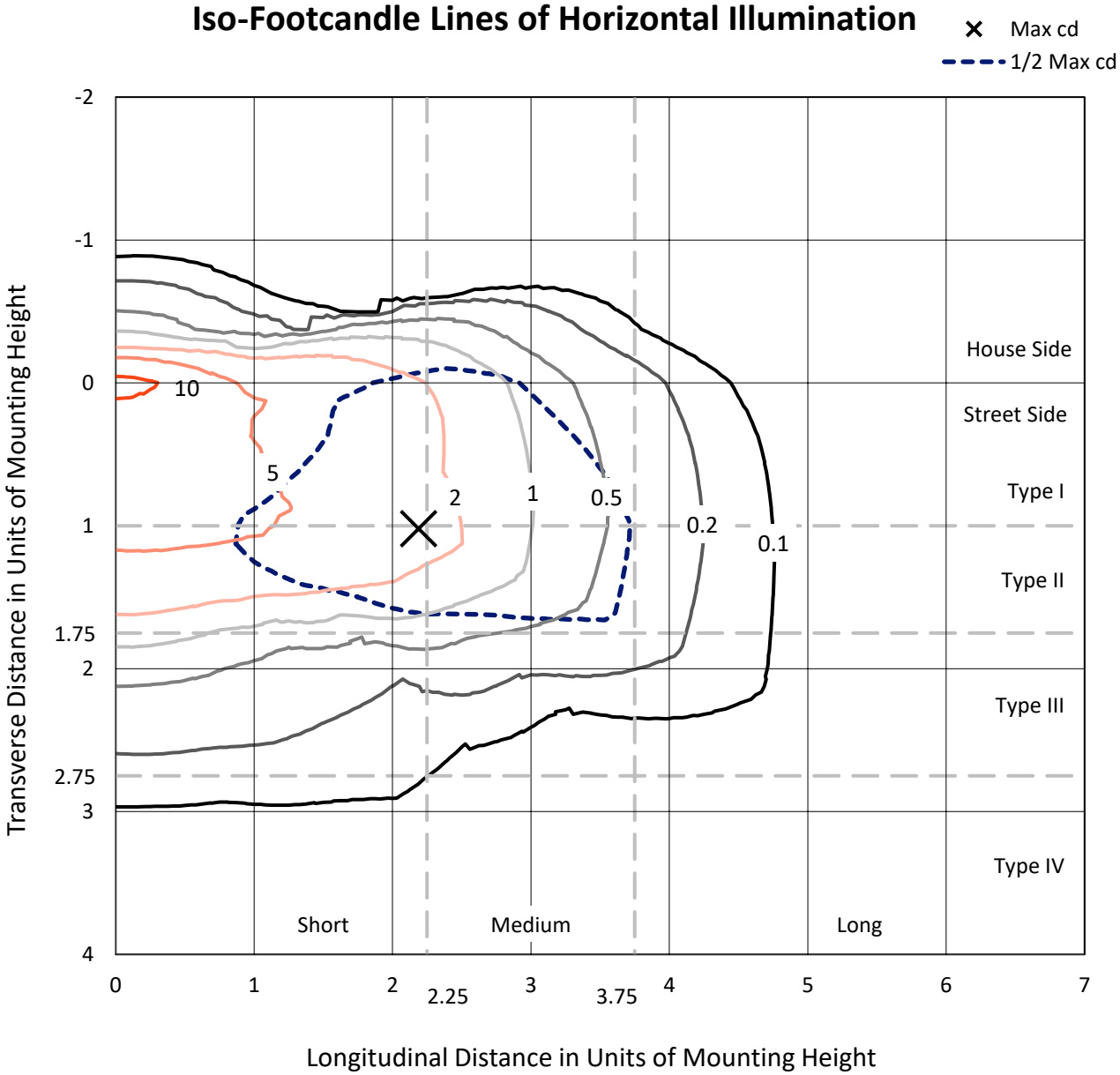
REPORT NUMBER: P631046
CATALOG NUMBER: GWS-SA1E-830-U-SL2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 11.6 fc
Type II - Short - N/A

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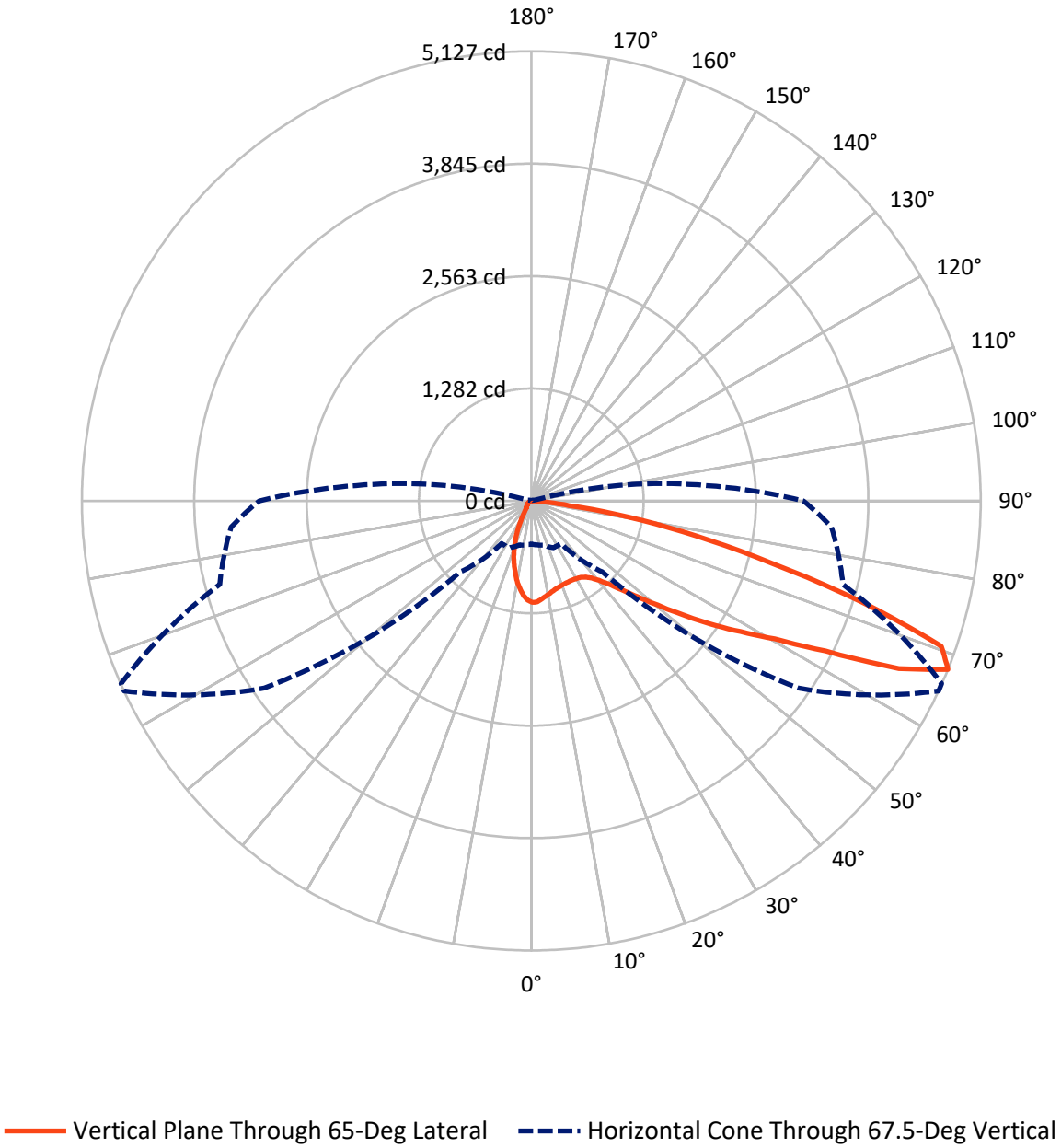
Luminous Intensity Polar Plot



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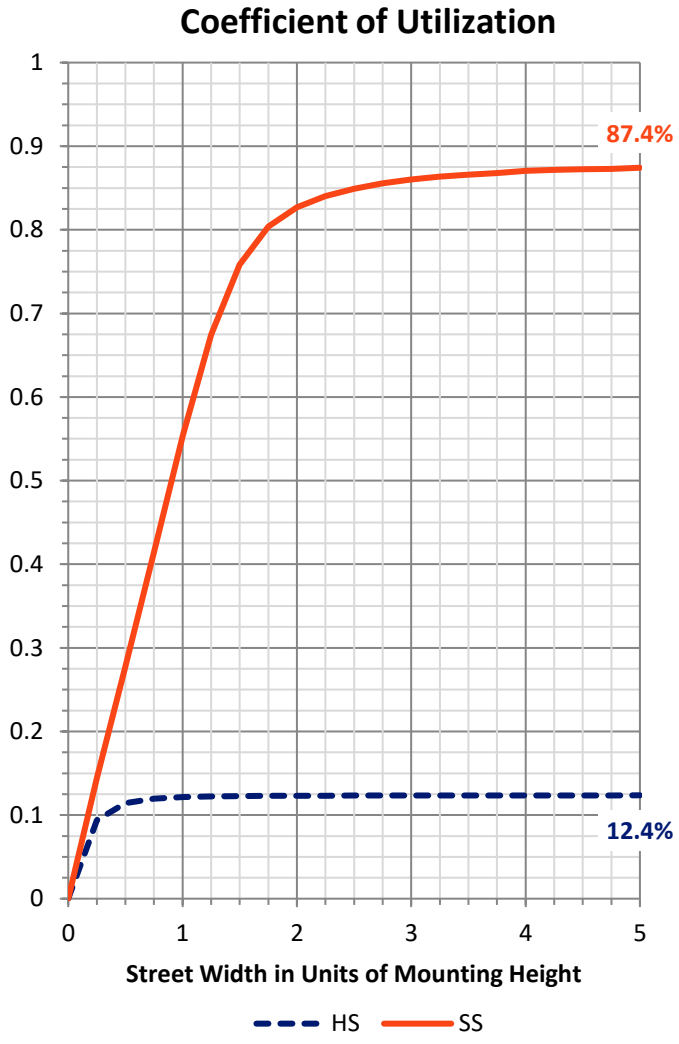
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	595.9	0.0	595.9
	% Fixture	12.5	0.0	12.5
Street Side	Lumens	4175.9	0.0	4175.9
	% Fixture	87.5	0.0	87.5
Total	Lumens	4771.8	0.0	4771.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.1	2.0
10°-20°	216.1	4.5
20°-30°	308.8	6.5
30°-40°	449.2	9.4
40°-50°	703.5	14.7
50°-60°	1097.5	23.0
60°-70°	1205.6	25.3
70°-80°	641.6	13.4
80°-90°	53.4	1.1
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°	4771.8	100.0
0°-180°	4771.8	100.0



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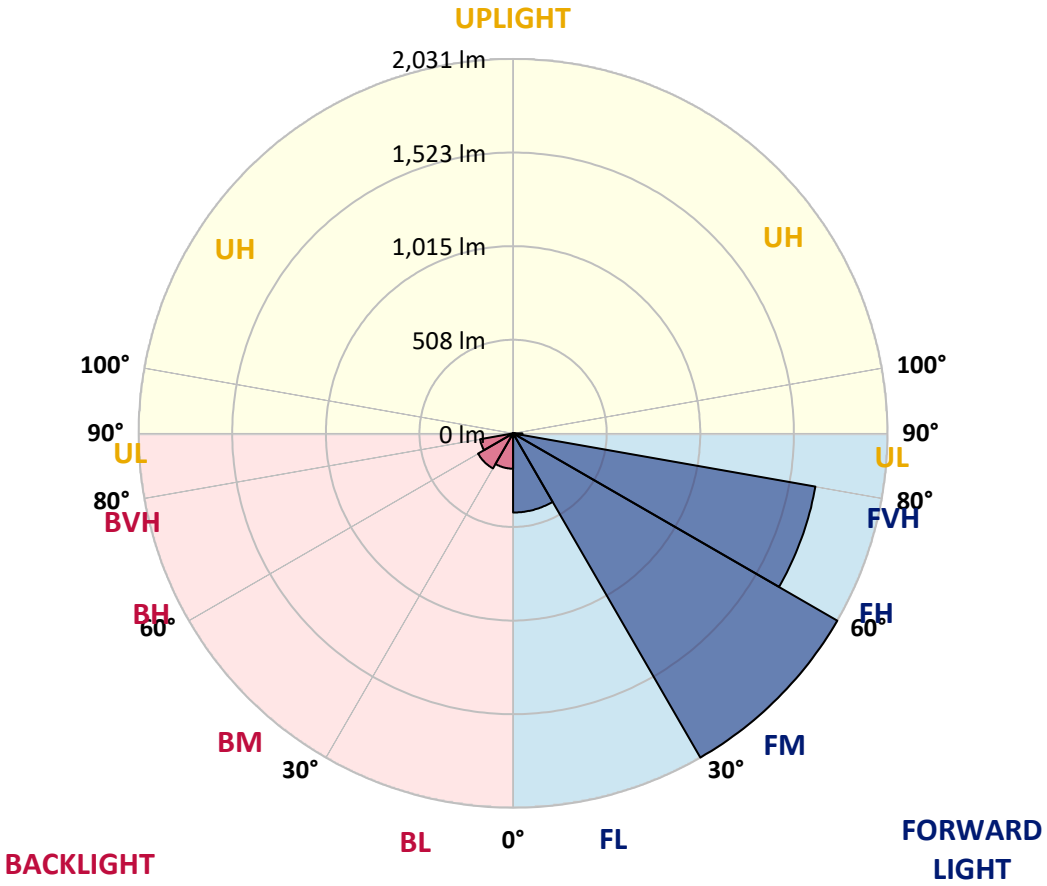
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	429.4	9.0			
FM	(30°-60°)	2030.8	42.6			
FH	(60°-80°)	1665.2	34.9			G1/1800
FVH	(80°-90°)	50.6	1.1			G1/100
BL	(0°-30°)	191.5	4.0	B1/500		
BM	(30°-60°)	219.5	4.6	B0/220		
BH	(60°-80°)	182.0	3.8	B1/500		G1/500
BVH	(80°-90°)	2.9	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-G1
Type II Short



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Scaled Data Report

REPORT NUMBER: P631046
CATALOG NUMBER: GWS-SA1E-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3
2.5°	1117.2	1120.6	1115.9	1127.5	1129.7	1142.6	1150.0	1155.2	1154.7	1161.2	1161.2
5°	1051.6	1055.0	1052.5	1065.0	1074.9	1095.2	1112.0	1131.4	1132.3	1152.1	1159.5
7.5°	995.9	996.4	996.4	1011.9	1024.8	1049.9	1074.9	1104.7	1108.1	1138.8	1158.2
10°	950.2	951.5	951.9	969.6	983.8	1014.1	1046.0	1081.8	1085.7	1127.1	1157.3
12.5°	918.7	919.1	920.8	939.4	954.9	986.4	1018.8	1059.8	1065.0	1113.7	1153.4
15°	903.6	902.7	903.6	919.1	934.7	964.9	998.1	1042.1	1047.7	1102.5	1153.9
17.5°	902.7	901.4	900.6	912.2	922.1	948.9	982.5	1030.4	1036.5	1097.3	1158.6
20°	915.2	914.4	910.1	915.2	917.4	939.4	972.6	1021.4	1027.4	1096.5	1169.0
22.5°	948.0	945.9	939.4	934.7	923.0	935.9	965.7	1014.9	1021.8	1098.6	1182.3
25°	996.8	995.9	987.7	976.1	946.3	941.1	966.2	1014.9	1021.4	1101.2	1196.6
27.5°	1070.1	1065.0	1054.6	1034.3	991.6	961.4	974.8	1017.5	1024.0	1104.7	1208.2
30°	1144.8	1144.4	1140.9	1120.2	1056.8	1000.2	992.9	1024.4	1030.4	1107.7	1219.0
32.5°	1222.0	1223.3	1232.0	1216.0	1146.5	1058.1	1025.7	1038.6	1043.0	1113.7	1228.5
35°	1295.4	1298.0	1320.9	1326.5	1255.7	1145.7	1079.2	1067.1	1067.6	1127.1	1241.0
37.5°	1365.7	1374.4	1411.0	1438.2	1391.6	1251.8	1156.4	1115.5	1112.0	1153.9	1260.0
40°	1445.6	1462.0	1508.1	1554.3	1539.6	1392.1	1261.7	1189.7	1182.3	1203.1	1294.1
42.5°	1534.0	1551.7	1613.0	1677.7	1684.6	1561.6	1393.3	1298.0	1285.5	1285.9	1358.0
45°	1629.0	1652.7	1723.9	1817.1	1858.9	1750.6	1555.6	1444.3	1431.8	1413.2	1460.7
47.5°	1753.7	1774.4	1843.0	1950.4	2030.7	1953.4	1768.3	1632.4	1609.5	1582.3	1620.3
50°	1861.1	1879.2	1938.3	2073.0	2240.0	2214.9	2009.5	1867.6	1845.6	1799.4	1830.9
52.5°	1884.8	1899.1	1953.4	2104.9	2400.1	2545.1	2305.1	2151.9	2136.4	2051.0	2063.1
55°	1778.3	1799.8	1848.6	2016.9	2441.9	2867.8	2688.7	2472.6	2440.2	2303.8	2325.4
57.5°	1509.0	1547.4	1593.1	1811.9	2328.4	3039.6	3224.7	2812.2	2782.8	2547.2	2547.6
60°	1106.0	1137.0	1167.7	1367.9	2059.2	3027.9	3711.0	3193.6	3140.1	2746.1	2738.8
62.5°	804.3	820.3	819.9	891.1	1414.1	2828.6	3966.4	3768.4	3643.7	2958.9	2917.0
65°	632.6	632.2	650.7	674.0	789.7	2183.4	3997.9	4607.7	4473.0	3244.1	3156.9
67.5°	492.4	501.8	520.4	589.0	593.3	1142.6	3720.9	5126.8	5124.2	3679.5	3437.8
70°	379.7	392.7	419.0	519.1	548.0	639.5	2784.1	4962.4	5004.2	3874.1	3238.9
72.5°	243.8	242.9	281.8	419.4	526.4	532.9	1539.6	3941.9	3989.3	3509.0	2618.8
75°	136.4	137.2	159.2	256.7	490.6	501.4	762.5	2810.9	2848.4	2735.8	2012.1
77.5°	53.5	55.2	74.7	135.1	323.6	447.9	453.1	1916.8	1922.4	1695.4	1234.1
80°	21.6	22.9	38.0	83.7	197.2	301.6	323.6	1129.3	1106.4	656.3	359.0
82.5°	6.5	6.9	15.1	47.5	103.1	214.5	218.3	433.2	409.1	141.1	91.5
85°	0.4	0.4	3.5	14.7	36.7	53.9	145.4	141.1	125.1	35.4	40.6
87.5°	0.0	0.0	0.4	0.4	0.9	1.7	15.5	25.9	26.3	6.5	18.1
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: P631046
CATALOG NUMBER: GWS-SA1E-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3	1157.3
2.5°	1161.2	1145.7	1144.4	1132.3	1120.2	1105.1	1087.4	1074.5	1065.4	1049.4	1046.4
5°	1159.5	1138.8	1119.3	1084.8	1046.4	1005.0	968.7	935.1	913.9	899.7	893.7
7.5°	1156.0	1129.7	1084.8	1019.7	955.4	882.9	826.3	774.6	739.2	718.5	709.4
10°	1153.4	1118.0	1045.1	946.3	846.6	746.5	660.6	583.8	541.1	507.5	501.8
12.5°	1148.3	1101.2	994.2	860.4	731.8	598.9	489.3	395.3	330.1	300.8	290.4
15°	1143.1	1083.5	943.3	769.8	606.7	442.7	309.8	219.2	174.3	160.5	159.7
17.5°	1142.2	1067.6	888.0	683.9	475.5	290.0	176.5	142.0	132.5	129.0	129.0
20°	1144.8	1054.2	833.7	585.1	346.5	176.5	131.6	123.0	117.4	114.4	114.4
22.5°	1147.4	1040.4	781.5	485.4	230.0	129.0	116.1	108.7	102.3	98.8	97.1
25°	1149.1	1025.3	723.6	385.3	150.2	112.2	101.8	92.3	84.6	80.3	80.3
27.5°	1148.7	1007.1	665.4	287.4	116.5	99.7	87.2	77.2	69.5	64.7	65.2
30°	1145.2	987.3	605.0	200.7	101.8	87.2	74.7	64.3	56.5	52.6	52.2
32.5°	1142.6	966.2	535.1	141.1	91.5	76.4	63.4	53.5	47.0	44.0	43.6
35°	1139.6	945.4	468.6	107.4	82.4	66.0	53.5	45.3	40.1	37.5	37.5
37.5°	1140.5	923.9	396.6	92.3	73.4	57.4	45.7	38.8	34.5	31.9	31.5
40°	1153.9	910.9	325.8	83.7	65.2	49.6	39.7	33.7	29.3	26.8	26.3
42.5°	1187.1	911.4	258.0	77.2	57.8	42.3	34.5	28.9	25.0	22.0	21.6
45°	1253.5	929.5	198.1	70.3	50.1	36.7	29.8	24.6	20.7	18.1	17.7
47.5°	1362.3	983.4	150.2	64.3	43.6	31.9	25.5	20.7	17.3	15.1	14.7
50°	1535.3	1080.9	118.2	57.0	36.7	27.6	21.6	17.3	14.2	12.1	11.7
52.5°	1743.3	1227.2	101.4	50.5	31.5	24.2	18.6	14.2	11.7	9.9	9.5
55°	1982.4	1402.0	93.6	44.0	26.8	20.7	15.1	11.7	9.5	8.2	7.3
57.5°	2201.6	1559.5	93.2	37.5	22.9	17.7	12.5	9.9	8.2	6.5	6.0
60°	2415.2	1691.1	87.6	31.1	19.8	14.7	10.8	8.2	6.9	5.6	5.2
62.5°	2608.9	1798.1	73.4	25.0	16.8	12.1	9.1	7.3	6.0	4.7	4.7
65°	2852.3	1934.5	56.1	20.3	13.8	9.9	7.8	6.5	5.6	4.3	4.3
67.5°	*3103.9*	*2006.5*	*40.1*	*16.8*	*11.2*	*8.6*	*6.9*	*6.0*	*4.7*	*3.9*	*3.9*
70°	2811.3	1695.4	28.9	13.8	9.5	7.3	6.0	5.6	4.7	3.9	3.5
72.5°	2195.5	1222.5	21.6	10.8	8.2	6.9	5.6	5.2	4.3	3.5	3.5
75°	1628.1	712.9	16.4	8.6	6.5	5.6	5.6	5.2	4.3	3.5	3.0
77.5°	885.0	248.6	12.5	6.9	5.2	4.3	4.7	4.7	3.9	3.0	2.6
80°	234.3	68.2	8.6	5.2	4.3	3.5	3.5	4.3	3.5	2.6	2.6
82.5°	68.2	19.8	6.0	4.3	3.5	3.0	3.0	3.0	2.6	2.2	1.7
85°	33.2	7.3	4.3	3.5	3.0	2.6	2.2	2.2	1.7	1.3	1.3
87.5°	14.7	3.0	3.5	3.0	3.0	2.2	1.7	1.3	1.3	0.9	0.4
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

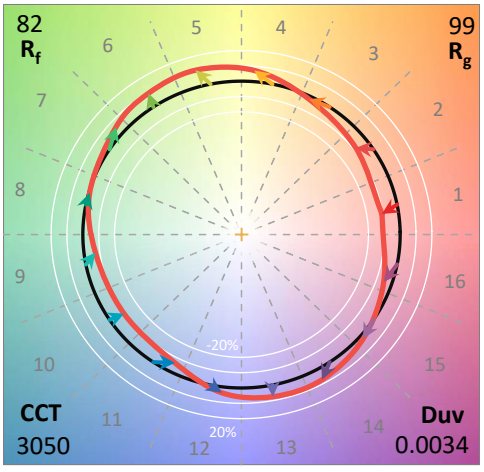
Test Information

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

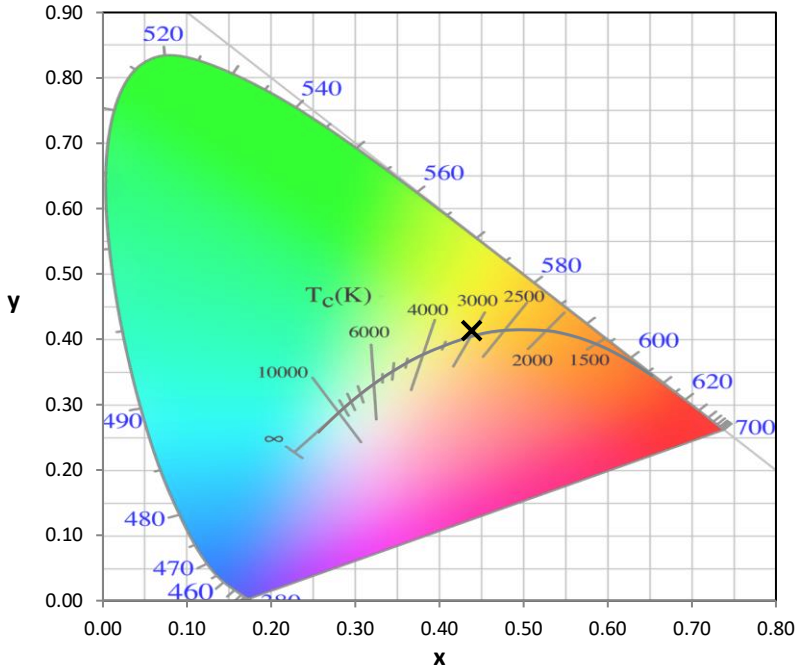
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

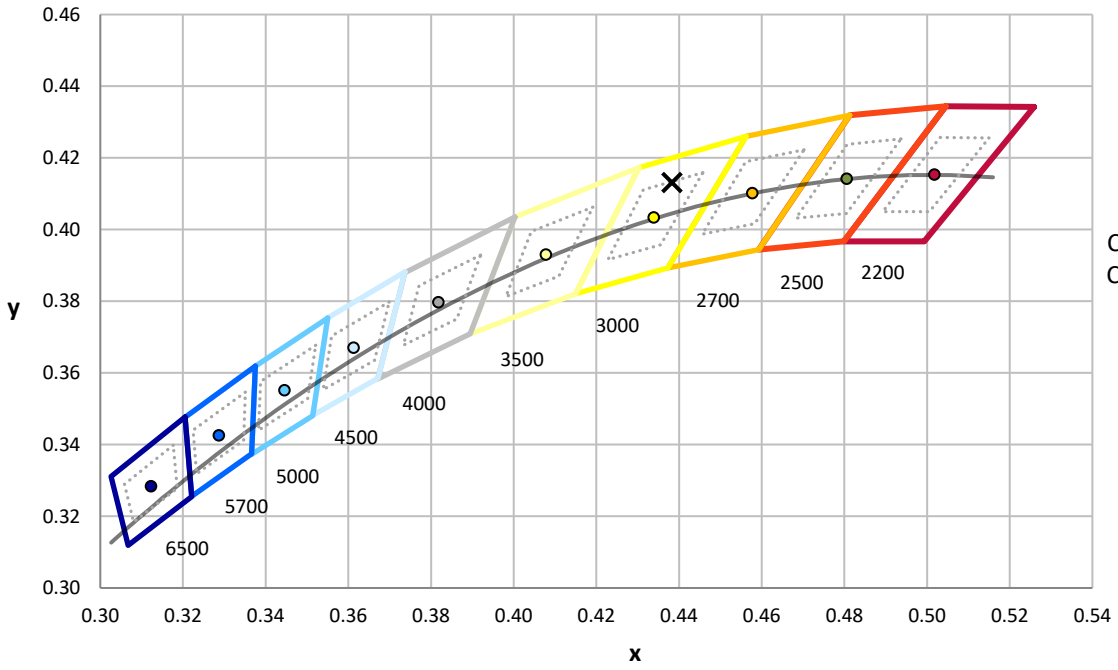
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

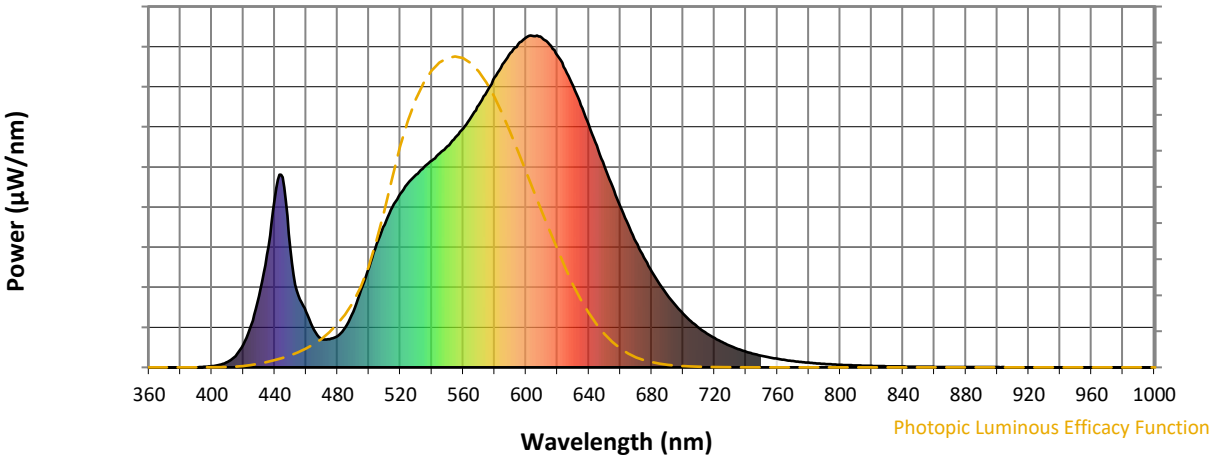


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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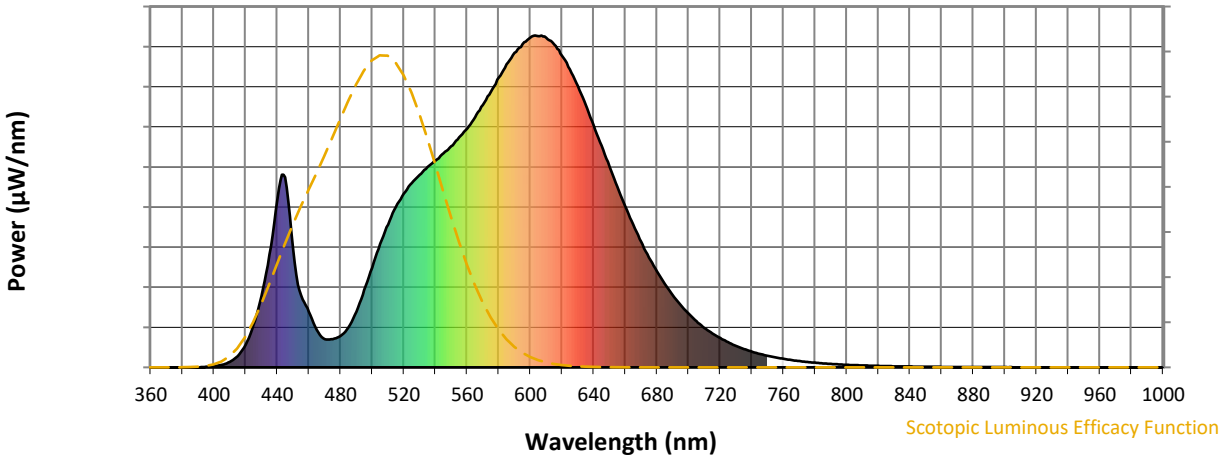
Scotopic Flux vs. Wavelength



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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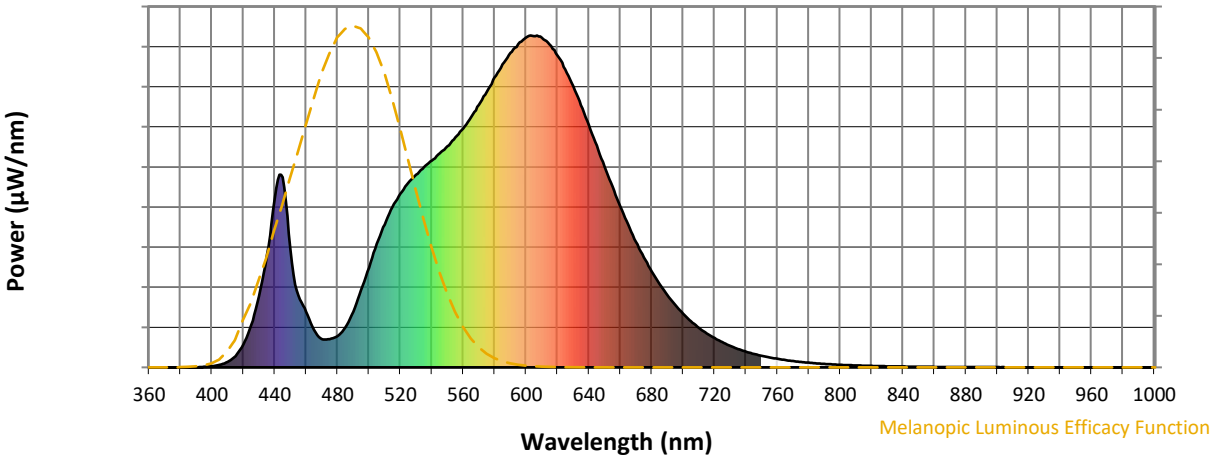
Melanopic Flux vs. Wavelength



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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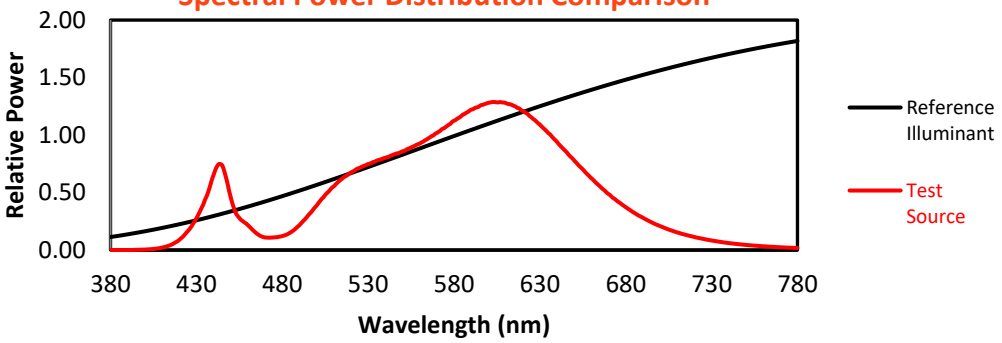
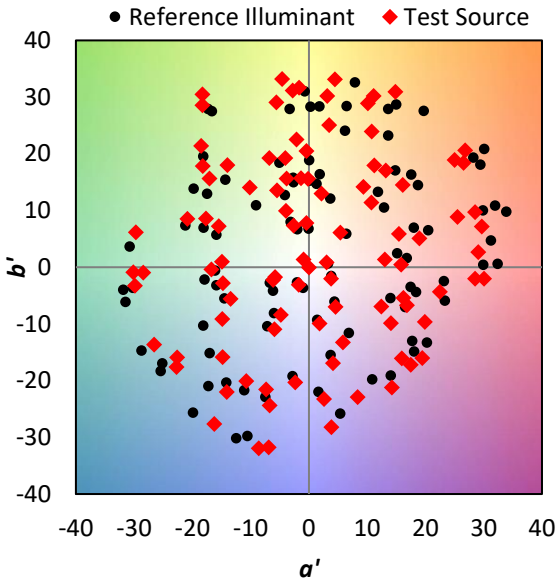
Summary

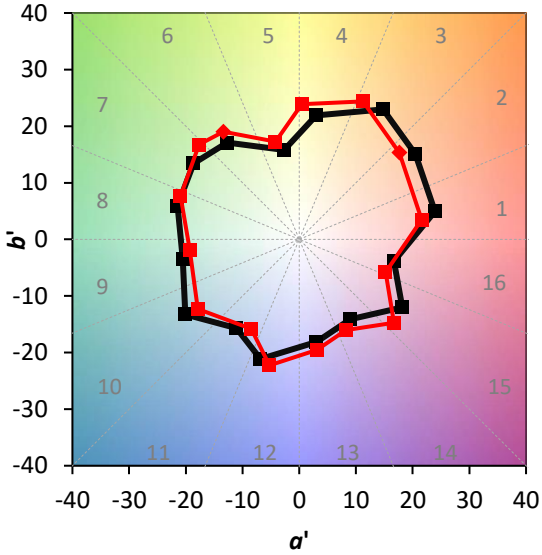
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

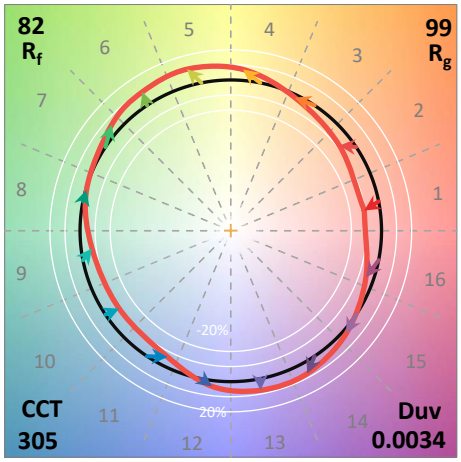
Spectral Power Distribution Comparison

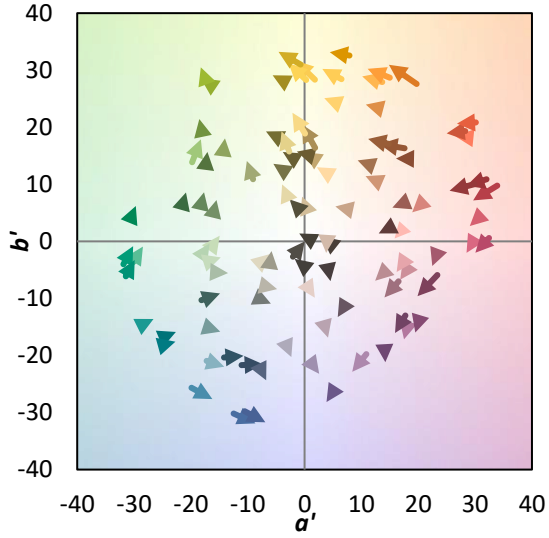


Color Vector Graphics









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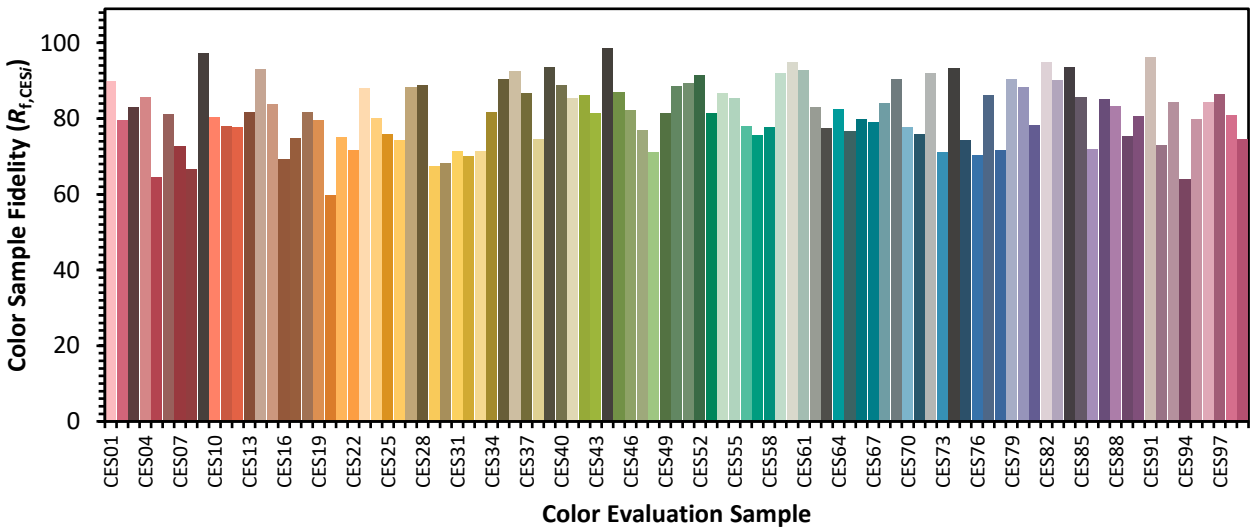
Individual Sample Fidelity Index ($R_{f,i}$)

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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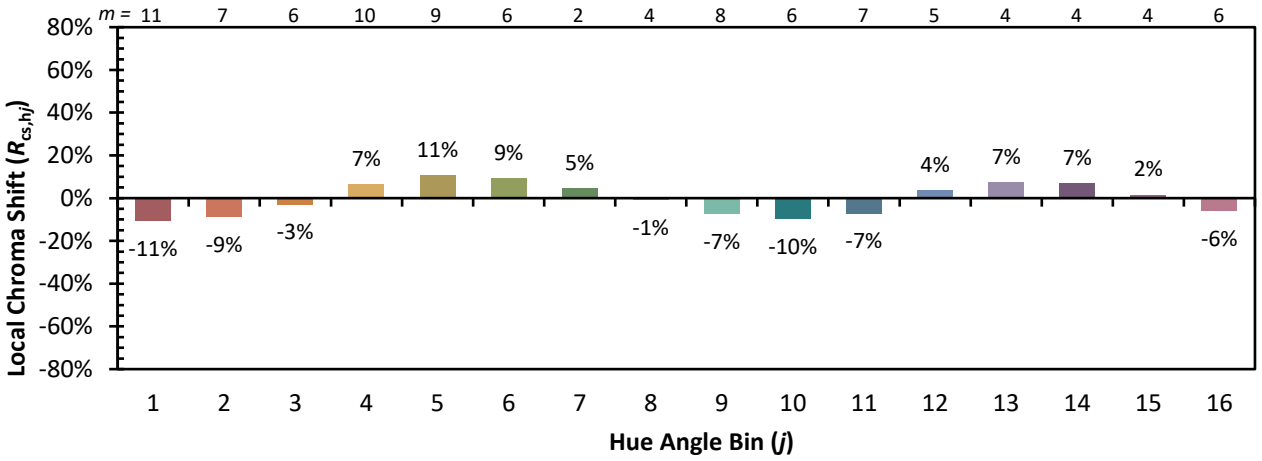
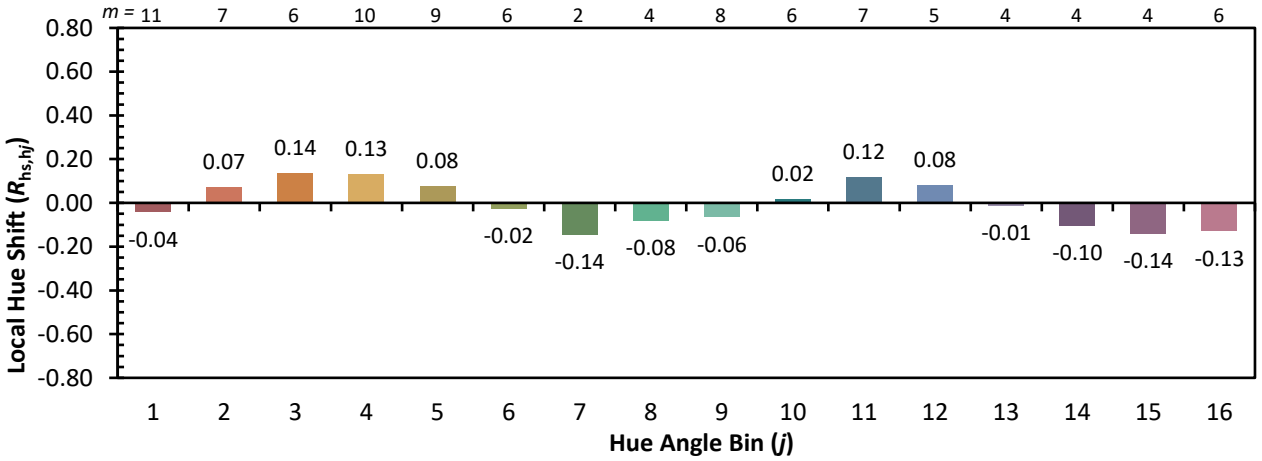
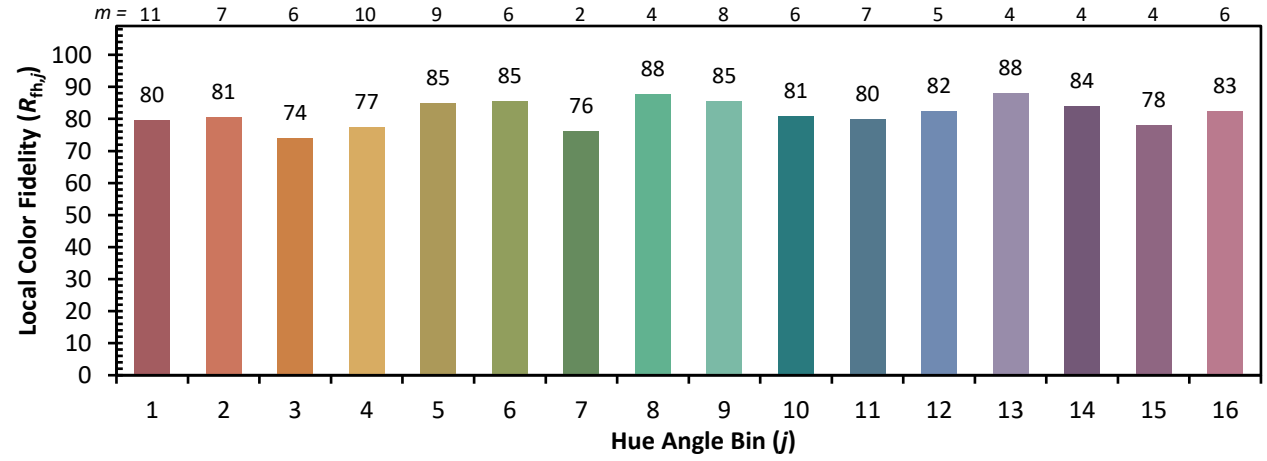
Color Rendition by Hue-Angle Bin







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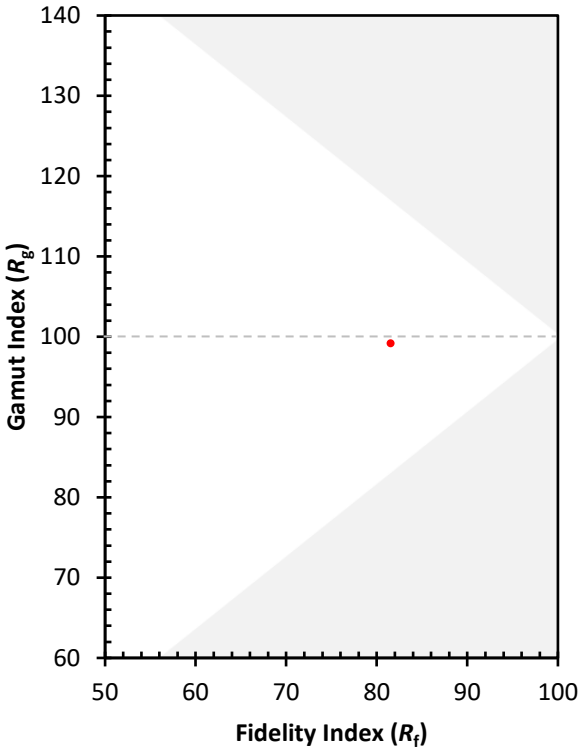
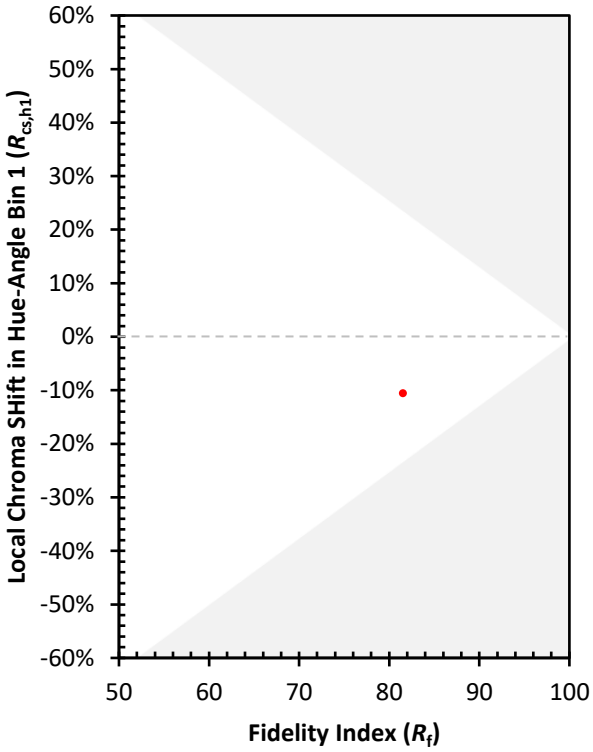
Measure Comparisons





(END OF REPORT)