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: P633527

Luminaire Tested: GWS-SA2E-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:	P633527
	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-SA2E-830-U-SL4-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	9132.7 lumens
Efficiency:	N/A
Efficacy:	84.4 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	108.2
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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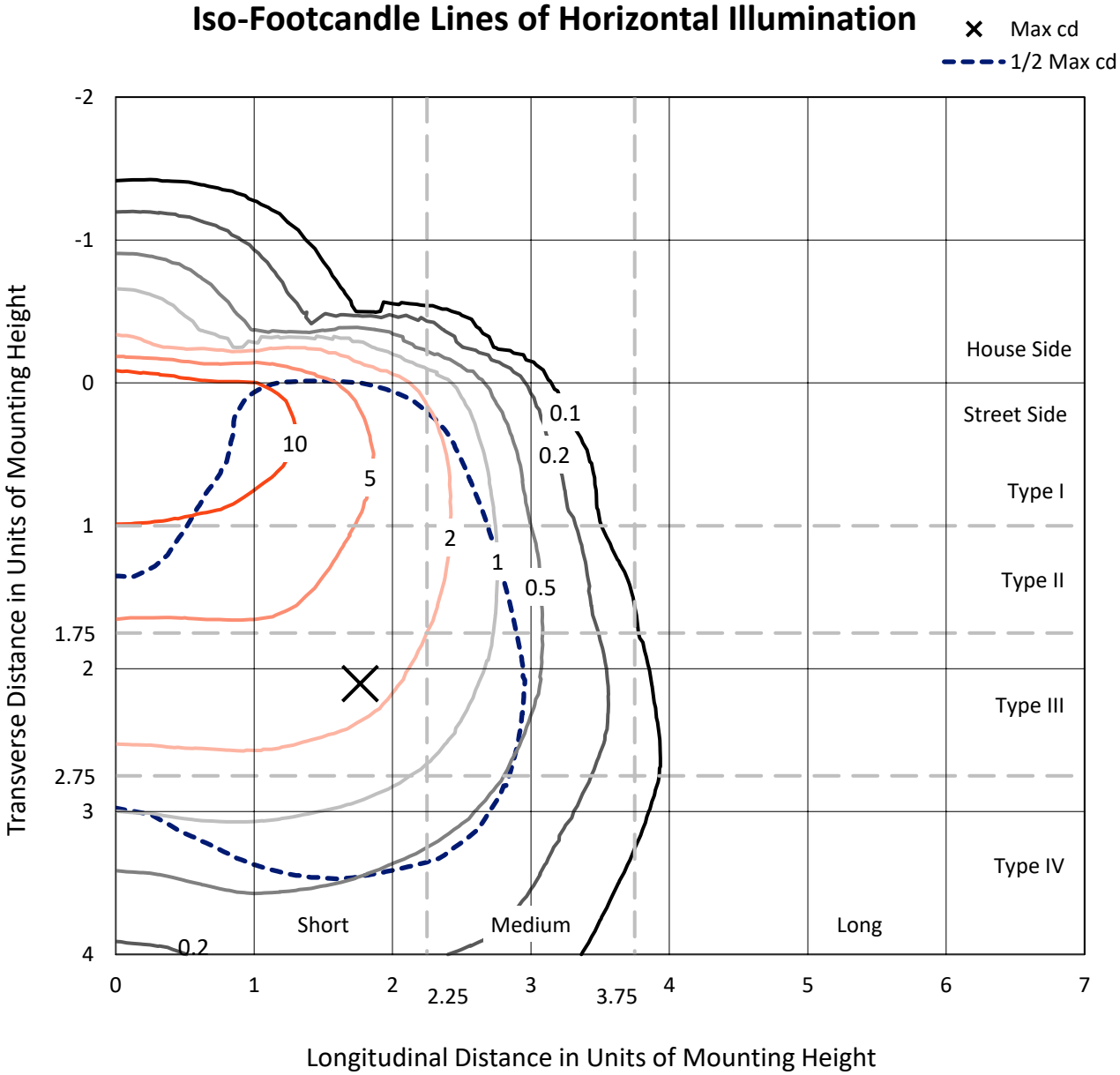
Scaled Data Report

REPORT NUMBER: P633527
CATALOG NUMBER: GWS-SA2E-830-U-SL4-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 16.9 fc
Type IV - Short - N/A

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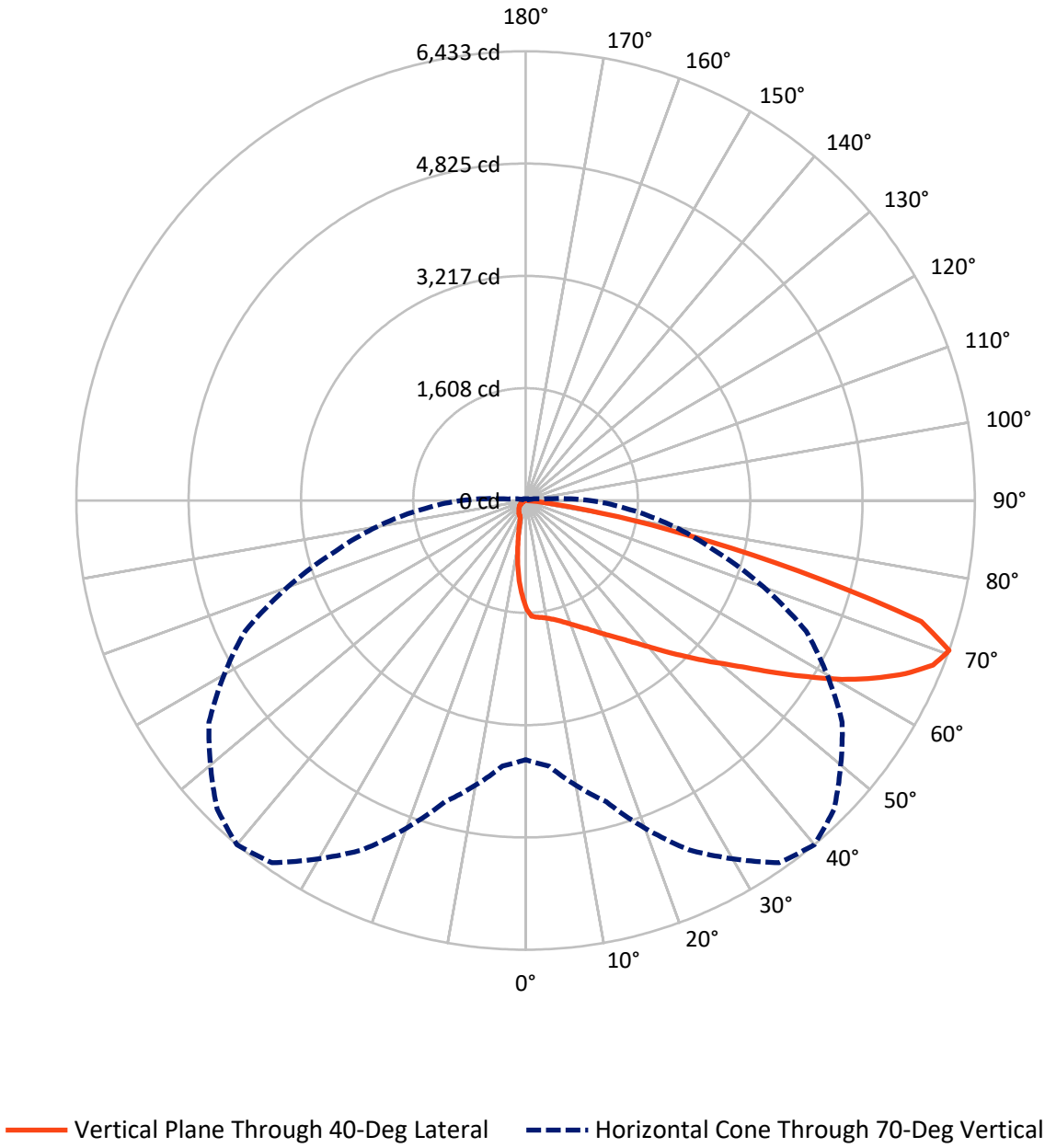
Luminous Intensity Polar Plot



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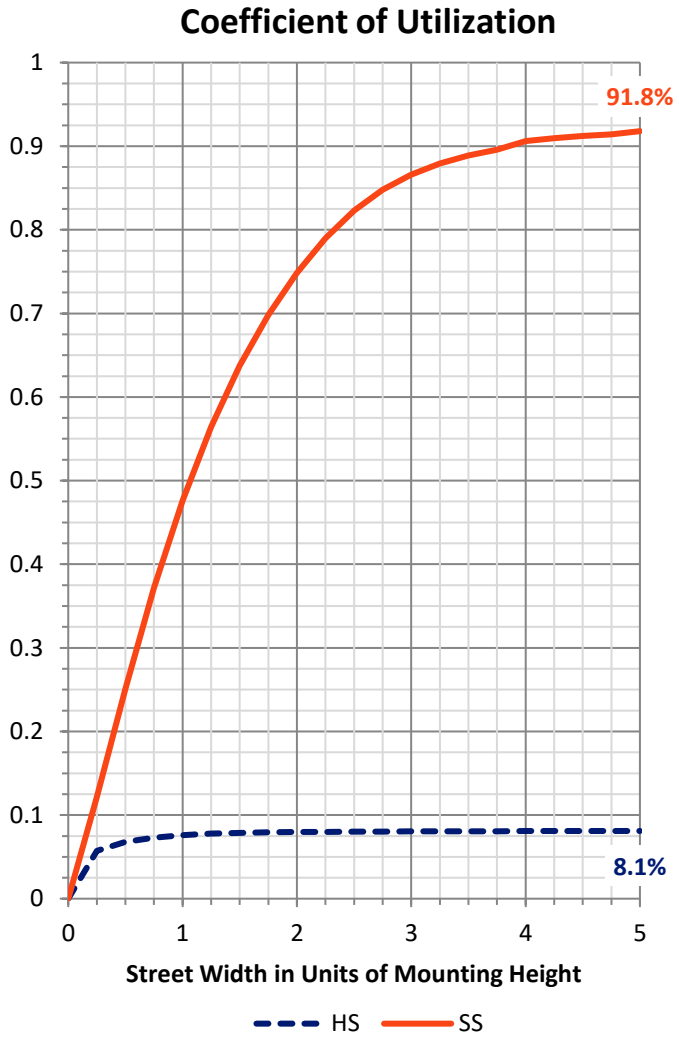
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	746.8	0.0	746.8
	% Fixture	8.2	0.0	8.2
Street Side	Lumens	8385.9	0.0	8385.9
	% Fixture	91.8	0.0	91.8
Total	Lumens	9132.7	0.0	9132.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.0	1.4
10°-20°	332.2	3.6
20°-30°	556.0	6.1
30°-40°	873.3	9.6
40°-50°	1381.3	15.1
50°-60°	2014.9	22.1
60°-70°	2497.8	27.4
70°-80°	1263.7	13.8
80°-90°	82.5	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°	9132.7	100.0
0°-180°	9132.7	100.0



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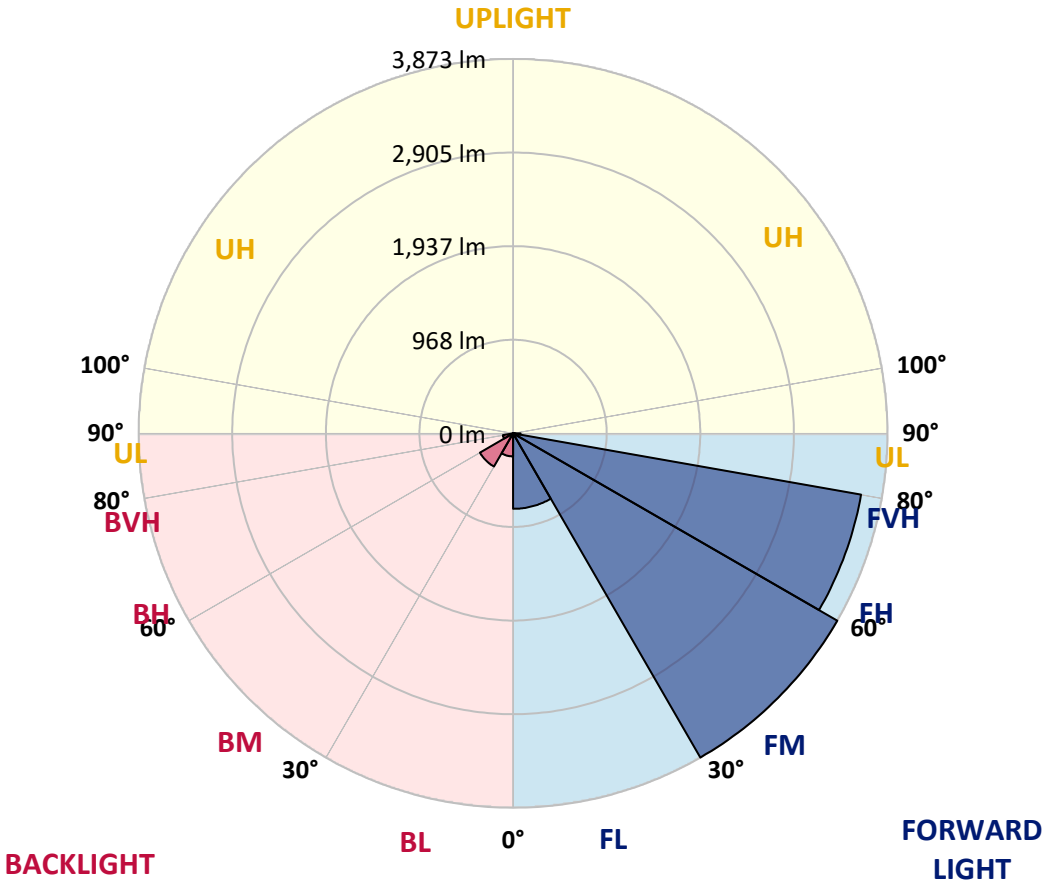
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	780.7	8.5			
FM	(30°-60°)	3873.1	42.4			
FH	(60°-80°)	3655.1	40.0			G2/5000
FVH	(80°-90°)	77.1	0.8			G1/100
BL	(0°-30°)	238.5	2.6	B1/500		
BM	(30°-60°)	396.4	4.3	B1/1000		
BH	(60°-80°)	106.5	1.2	B0/110		G0/110
BVH	(80°-90°)	5.4	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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Scaled Data Report

REPORT NUMBER: P633527
CATALOG NUMBER: GWS-SA2E-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1549.7	1549.7	1549.7	1549.7	1549.7	*1549.7*	1549.7	1549.7	1549.7	1549.7	1549.7
2.5°	1666.0	1671.9	1671.0	1673.5	1667.7	*1658.6*	1656.9	1644.4	1622.0	1593.7	1562.2
5°	1700.1	1706.8	1701.8	1699.3	1688.5	*1678.5*	1676.0	1662.7	1637.0	1598.7	1543.9
7.5°	1729.2	1730.9	1727.5	1721.7	1705.9	*1692.6*	1683.5	1665.2	1634.5	1596.2	1533.1
10°	1734.2	1733.3	1735.0	1735.8	1725.9	*1714.2*	1706.8	1681.8	1642.8	1602.1	1533.9
12.5°	1728.4	1728.4	1739.2	1751.6	1751.6	*1745.8*	1738.3	1715.9	1670.2	1622.0	1550.5
15°	1735.8	1738.3	1759.1	1782.4	1789.9	*1784.0*	1780.7	1757.4	1710.1	1656.9	1580.5
17.5°	1762.4	1764.9	1798.2	1833.1	1842.2	*1835.6*	1828.9	1805.6	1755.0	1696.8	1614.5
20°	1801.5	1808.1	1850.5	1895.4	1903.7	*1895.4*	1882.1	1849.7	1799.0	1740.0	1646.9
22.5°	1872.9	1877.1	1922.8	1970.2	1974.3	*1961.0*	1941.1	1896.2	1843.0	1785.7	1683.5
25°	1967.7	1973.5	2019.2	2064.9	2054.1	*2034.1*	2006.7	1956.0	1895.4	1839.7	1730.0
27.5°	2080.7	2087.3	2132.2	2172.1	2143.8	*2120.6*	2089.8	2026.7	1965.2	1914.5	1789.9
30°	2202.8	2208.6	2248.5	2284.3	2246.9	*2219.5*	2182.9	2118.1	2055.8	2017.5	1874.6
32.5°	2320.8	2320.0	2358.2	2387.3	2349.1	*2327.5*	2294.2	2228.6	2178.7	2162.1	2000.9
35°	2430.5	2430.5	2462.1	2491.2	2463.7	*2452.1*	2421.4	2369.0	2340.8	2360.7	2169.6
37.5°	2541.0	2535.2	2565.1	2597.5	2595.0	*2595.9*	2578.4	2553.5	2555.2	2625.8	2401.4
40°	2632.4	2629.9	2664.8	2707.2	2740.5	*2767.0*	2756.2	2765.4	2817.7	2949.8	2698.1
42.5°	2705.6	2711.4	2756.2	2823.5	2907.5	*2961.5*	2969.0	3006.4	3141.0	3345.4	3032.9
45°	2789.5	2790.3	2852.6	2955.7	3089.4	*3175.0*	3204.9	3301.3	3492.5	3755.9	3400.2
47.5°	2892.5	2882.5	2952.3	3096.9	3290.5	*3416.8*	3470.0	3590.5	3886.3	4156.4	3699.4
50°	3006.4	2988.1	3067.0	3263.9	3515.7	*3673.6*	3781.6	3957.8	4276.9	4485.4	3922.1
52.5°	3138.5	3121.0	3210.8	3455.9	3785.8	*3977.7*	4116.5	4294.3	4611.7	4736.4	4055.0
55°	3306.3	3288.9	3383.6	3686.1	4104.9	*4354.1*	4499.6	4649.1	4923.3	4921.7	4151.4
57.5°	3492.5	3468.4	3599.6	3976.9	4502.9	*4762.1*	4910.0	4983.2	5160.2	5065.4	4216.2
60°	3706.0	3684.4	3866.4	4323.4	4962.4	*5202.5*	5295.6	5265.7	5354.6	5150.2	4193.8
62.5°	3898.8	3888.8	4114.8	4690.7	5400.3	*5603.1*	5628.8	5498.4	5497.5	5151.8	4042.5
65°	4099.0	4118.2	4453.9	5113.6	5840.7	*5977.0*	5932.9	5729.4	5554.9	4948.3	3595.5
67.5°	4173.8	4229.5	4677.4	5495.9	6188.0	*6294.4*	6217.1	5844.9	5316.4	4263.6	2738.0
70°	*3711.8*	*3816.5*	*4466.3*	*5517.5*	*6331.8*	*6433.2*	*6247.9*	*5534.1*	*4432.3*	*2824.4*	*1499.9*
72.5°	2822.7	2944.9	3721.8	4517.8	5694.5	*5925.5*	5608.9	4508.7	2856.8	1237.3	503.6
75°	1579.6	1711.7	2772.0	3401.9	3823.2	*4034.2*	3917.9	2892.5	1265.5	323.2	150.4
77.5°	534.3	578.3	1289.6	2104.8	2523.6	*2334.1*	1976.0	1436.7	465.3	123.0	79.8
80°	316.6	333.2	480.3	1047.8	1327.8	*1101.0*	869.2	531.0	236.8	65.6	55.7
82.5°	94.7	112.2	265.1	388.9	520.2	*324.1*	274.2	303.3	123.0	35.7	46.5
85°	0.0	0.0	56.5	120.5	136.3	*53.2*	53.2	172.0	22.4	15.0	34.1
87.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.8	4.2	2.5	3.3	7.5
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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Scaled Data Report

REPORT NUMBER: P633527
CATALOG NUMBER: GWS-SA2E-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1549.7	1549.7	1549.7	1549.7	1549.7	1549.7	1549.7	1549.7	1549.7	1549.7	1549.7
2.5°	1539.7	1510.7	1476.6	1444.2	1413.4	1373.5	1354.4	1331.2	1311.2	1300.4	1306.2
5°	1509.0	1463.3	1393.5	1322.9	1251.4	1184.1	1123.4	1082.7	1046.2	1027.0	1031.2
7.5°	1482.4	1420.9	1312.1	1196.6	1081.9	966.4	872.5	799.4	742.9	719.6	715.4
10°	1470.8	1393.5	1239.8	1073.6	897.4	742.0	609.1	528.5	471.1	442.9	447.9
12.5°	1476.6	1379.4	1178.3	953.1	724.6	543.4	416.3	340.7	300.0	283.4	279.2
15°	1493.2	1376.0	1123.4	830.1	559.2	379.7	287.5	256.8	248.5	246.8	246.8
17.5°	1512.3	1376.9	1066.9	705.5	424.6	281.7	246.0	240.1	237.6	236.0	236.8
20°	1531.4	1376.9	1002.1	579.2	319.1	243.5	234.3	230.2	227.7	226.8	226.8
22.5°	1554.7	1376.9	929.8	462.0	255.9	231.0	223.5	221.0	218.5	217.7	216.9
25°	1582.9	1377.7	850.1	361.5	232.7	220.2	214.4	211.9	209.4	207.7	207.7
27.5°	1623.7	1384.4	762.0	281.7	219.4	210.2	205.2	202.8	200.3	197.8	197.8
30°	1682.7	1401.0	663.1	232.7	206.9	199.4	194.4	192.8	190.3	187.8	187.0
32.5°	1770.7	1430.1	560.9	208.6	195.3	187.8	182.0	180.3	177.8	175.3	174.5
35°	1893.7	1483.2	461.2	193.6	180.3	172.8	169.5	168.7	165.4	162.9	162.9
37.5°	2074.0	1569.7	365.6	178.7	167.9	162.0	157.9	156.2	152.9	150.4	149.6
40°	2294.2	1681.8	284.2	167.0	156.2	150.4	146.2	143.8	139.6	136.3	134.6
42.5°	2575.1	1818.9	224.4	154.6	145.4	139.6	136.3	131.3	125.5	120.5	119.7
45°	2867.6	1960.2	185.3	142.9	135.4	130.5	126.3	119.7	111.3	105.5	103.9
47.5°	3091.9	2048.3	162.0	130.5	124.6	120.5	115.5	107.2	97.2	90.6	88.9
50°	3252.3	2061.6	144.6	118.8	115.5	111.3	103.9	93.9	83.1	76.4	74.8
52.5°	3331.3	2001.7	130.5	108.0	105.5	101.4	92.2	81.4	69.8	63.2	61.5
55°	3367.0	1888.7	117.2	98.9	95.6	90.6	80.6	69.0	57.3	51.5	49.9
57.5°	3352.9	1721.7	105.5	89.7	85.6	79.8	69.0	56.5	47.4	41.5	40.7
60°	3248.2	1487.4	93.9	80.6	75.6	69.0	58.2	46.5	38.2	34.1	33.2
62.5°	3022.1	1196.6	82.3	69.8	66.5	59.8	49.9	38.2	31.6	29.1	28.3
65°	2559.3	845.9	70.6	59.0	57.3	50.7	41.5	31.6	27.4	25.8	24.9
67.5°	1839.7	514.4	59.8	50.7	49.0	43.2	34.9	27.4	24.9	24.1	24.1
70°	*924.8*	*243.5*	*47.4*	*41.5*	*41.5*	*35.7*	*29.9*	*24.9*	*24.1*	*23.3*	*23.3*
72.5°	314.1	103.9	35.7	32.4	34.1	30.7	25.8	23.3	23.3	23.3	23.3
75°	107.2	54.8	24.9	23.3	24.9	24.9	22.4	22.4	23.3	23.3	23.3
77.5°	69.8	36.6	17.4	15.8	19.1	19.1	19.1	20.8	22.4	22.4	22.4
80°	57.3	19.9	11.6	10.8	14.1	14.1	15.8	19.1	20.8	20.8	20.8
82.5°	49.0	12.5	6.6	7.5	10.0	10.8	13.3	15.8	18.3	19.1	19.1
85°	33.2	6.6	5.0	5.8	6.6	8.3	10.8	13.3	15.0	16.6	16.6
87.5°	9.1	2.5	3.3	4.2	4.2	5.8	8.3	10.0	11.6	12.5	12.5
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

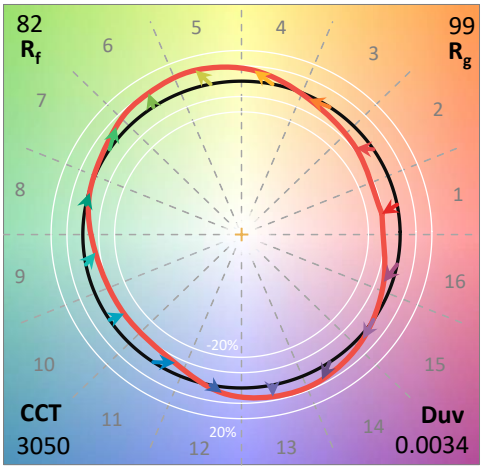
Test Information

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

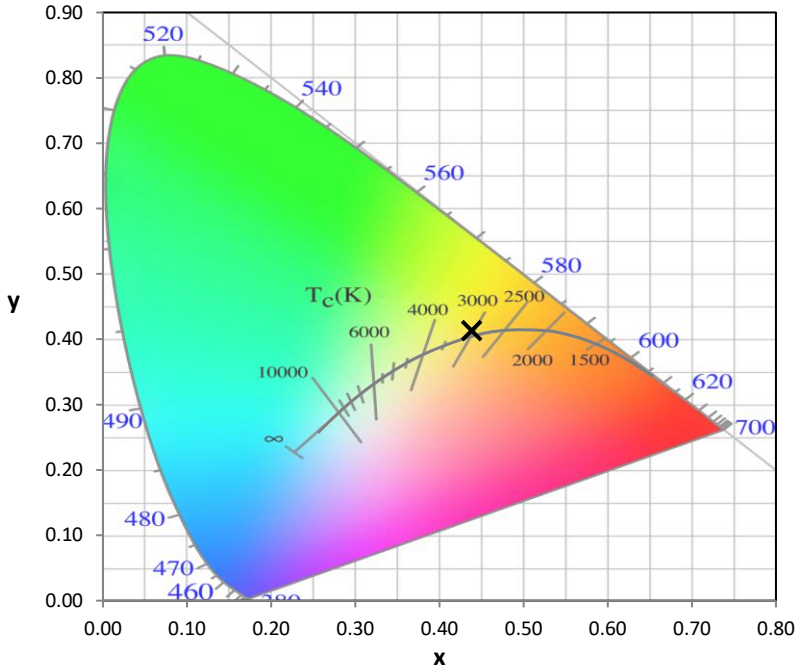
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

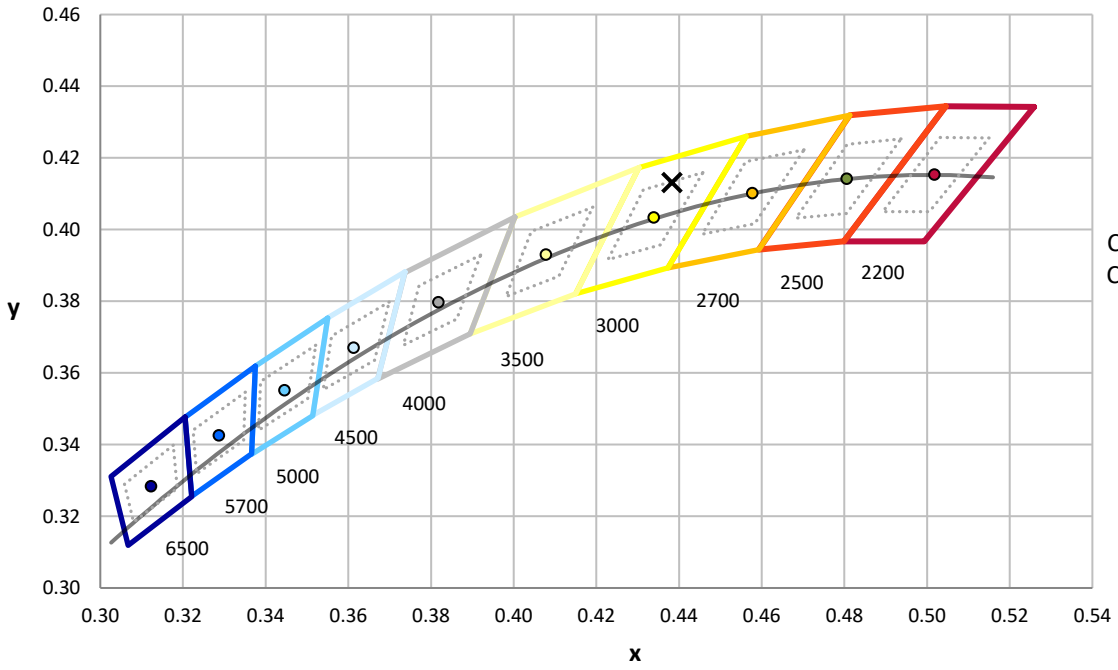
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

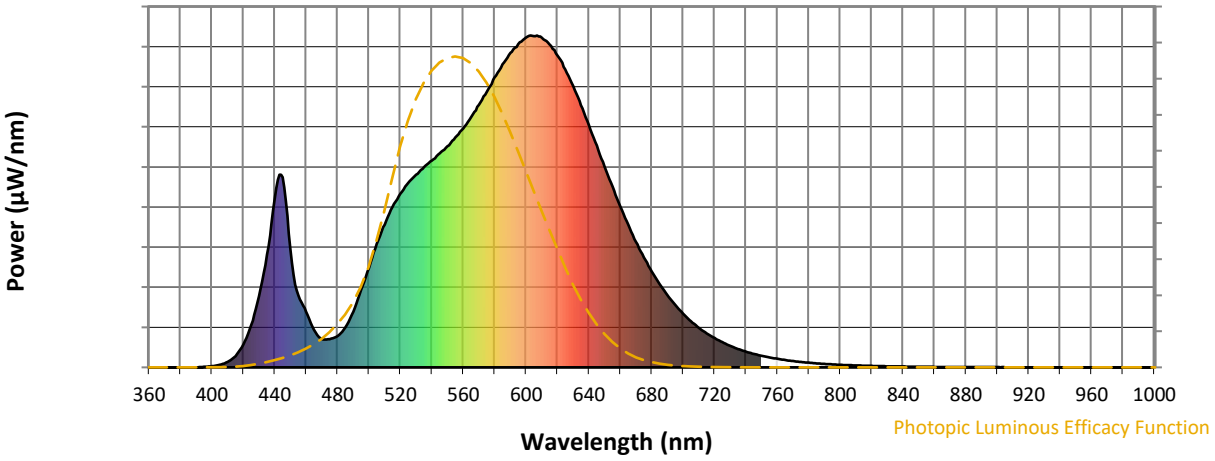


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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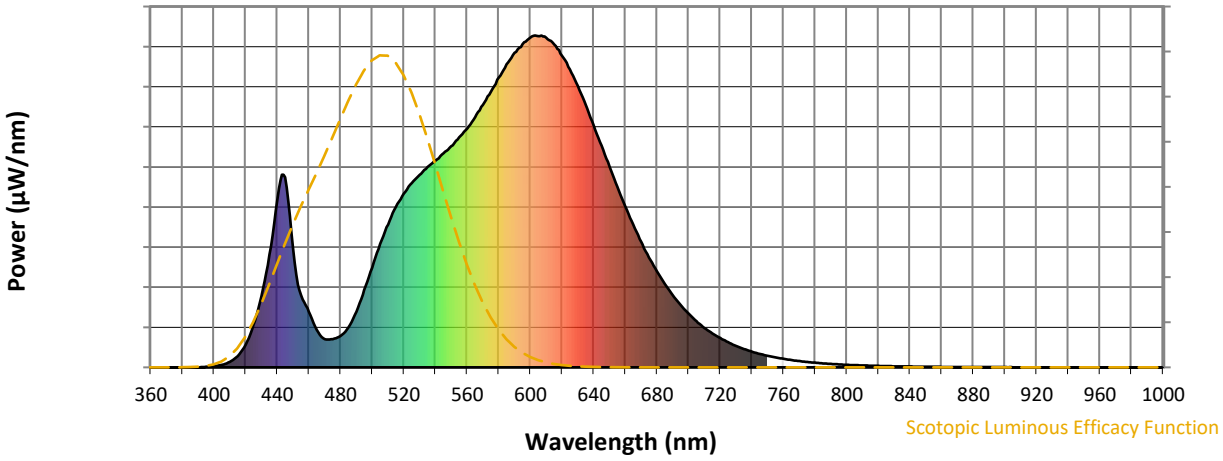
Scotopic Flux vs. Wavelength



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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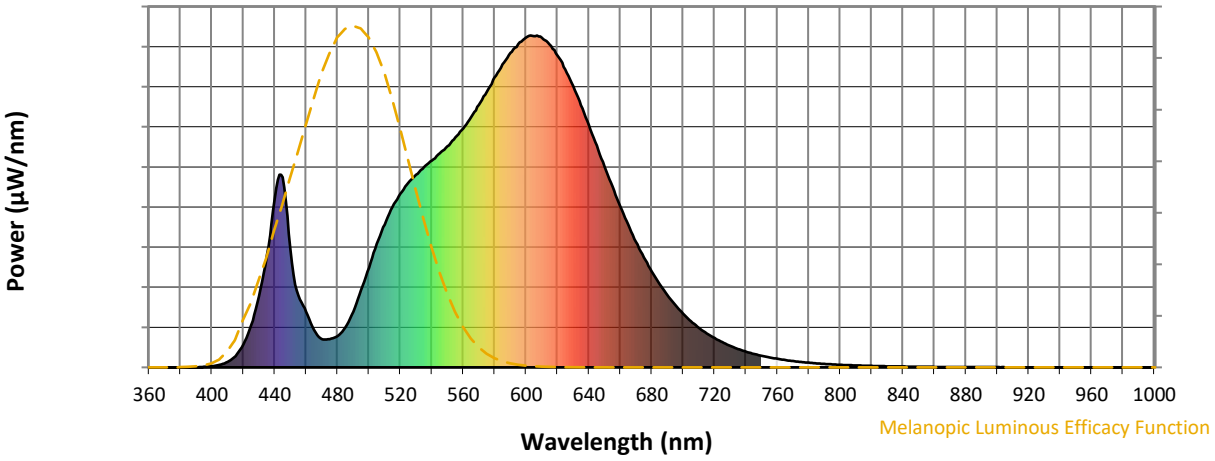
Melanopic Flux vs. Wavelength



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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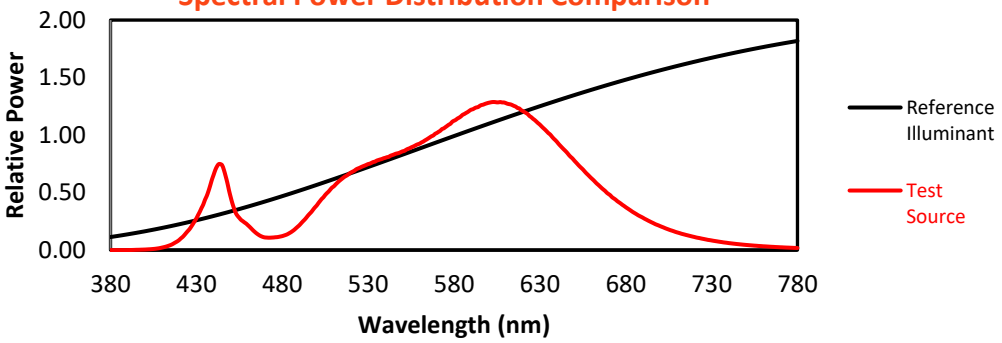
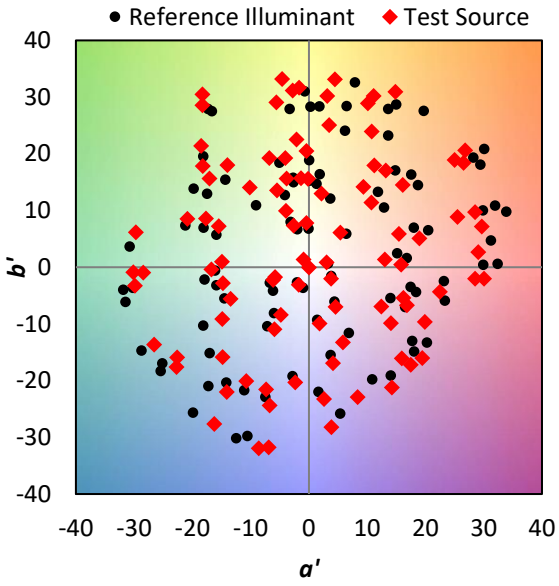
Summary

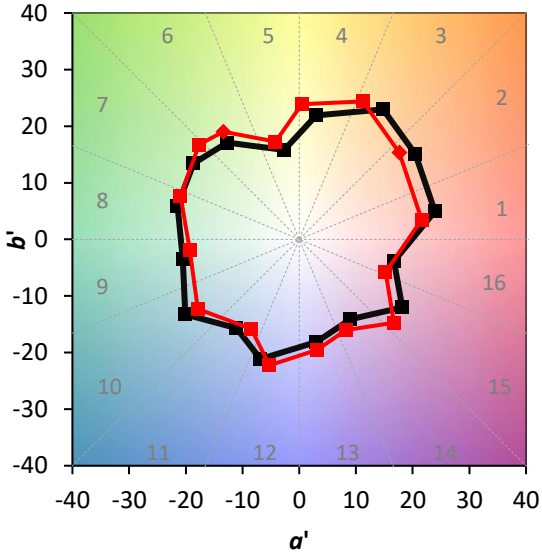
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

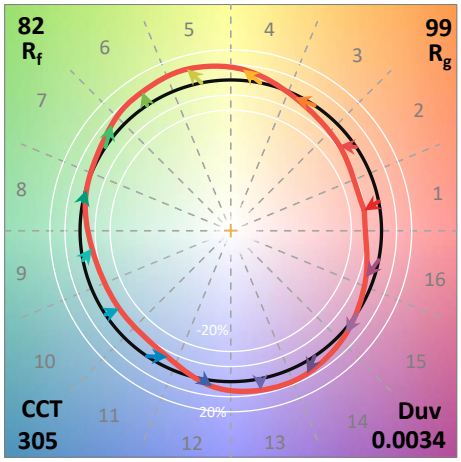
Spectral Power Distribution Comparison

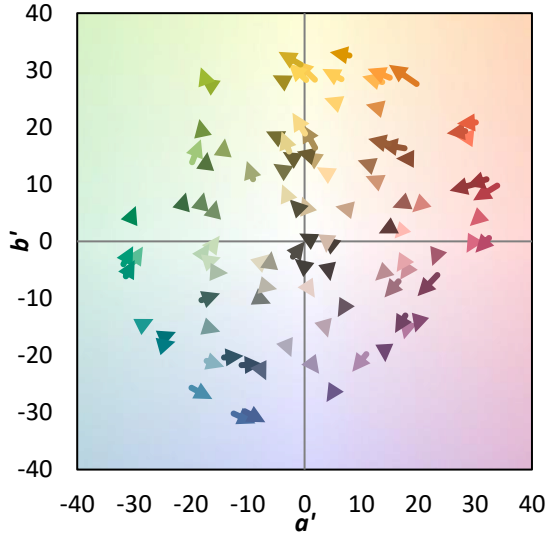


Color Vector Graphics









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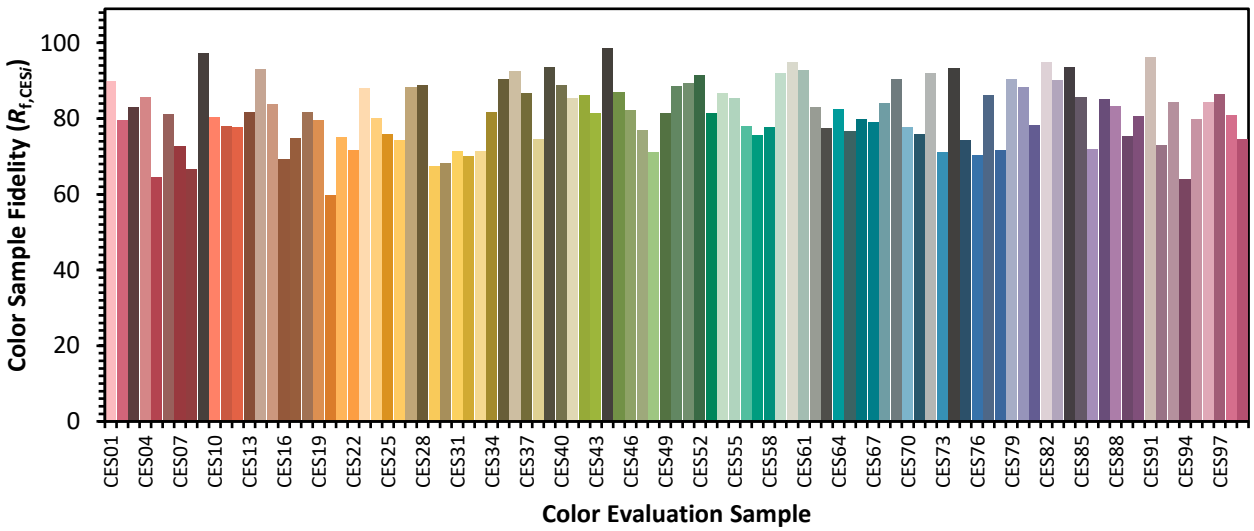
Individual Sample Fidelity Index ($R_{f,i}$)

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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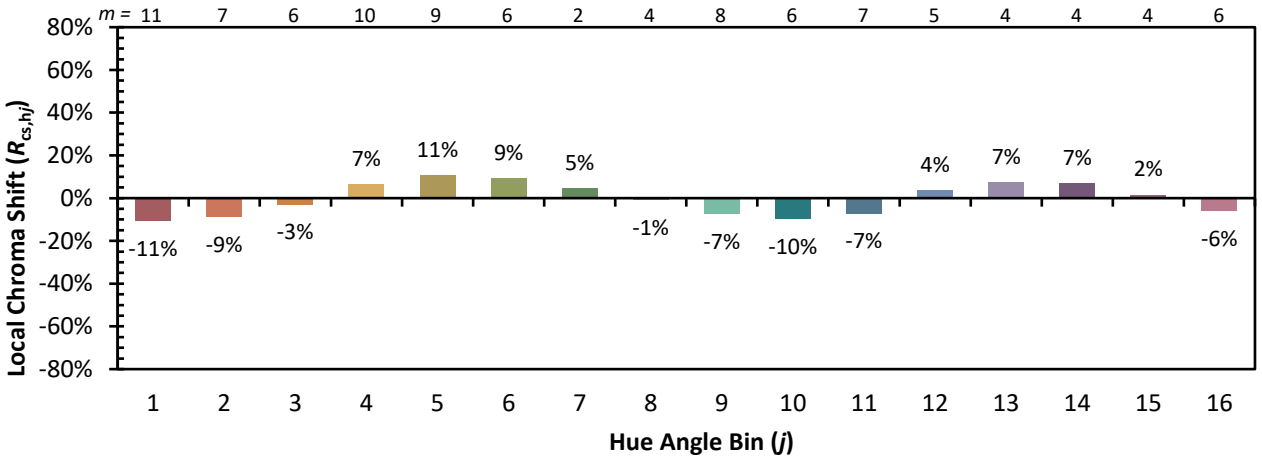
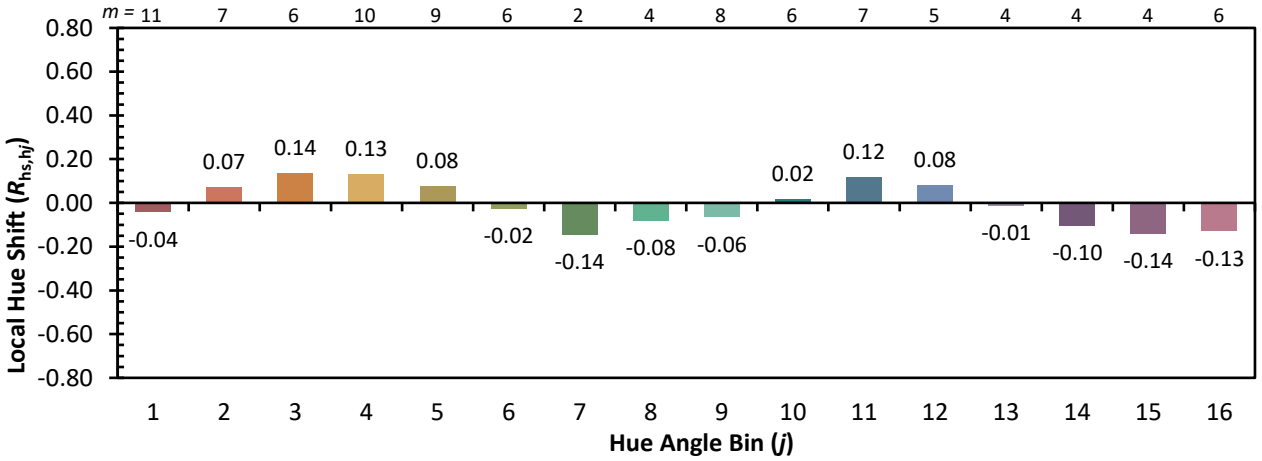
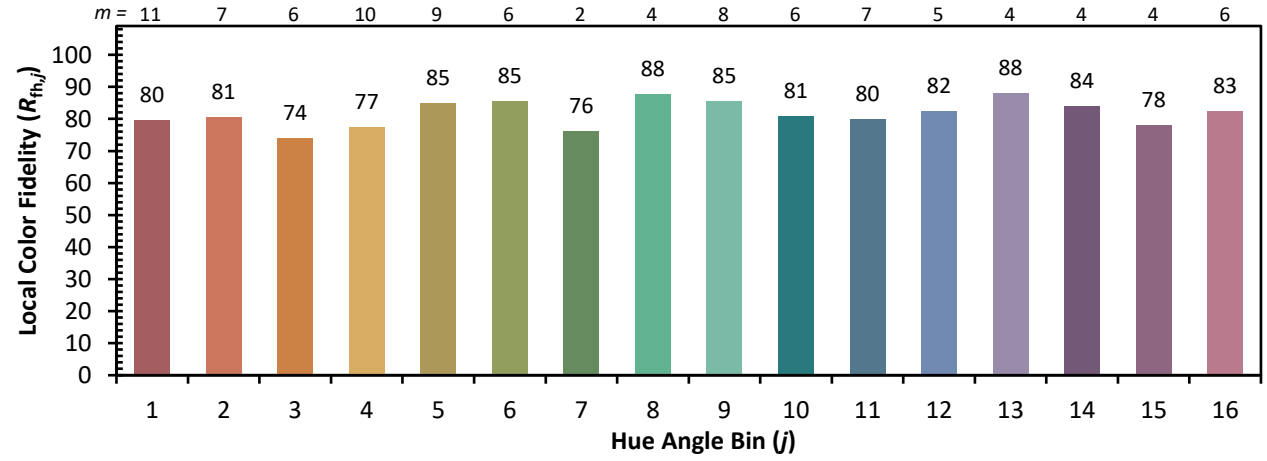
Color Rendition by Hue-Angle Bin







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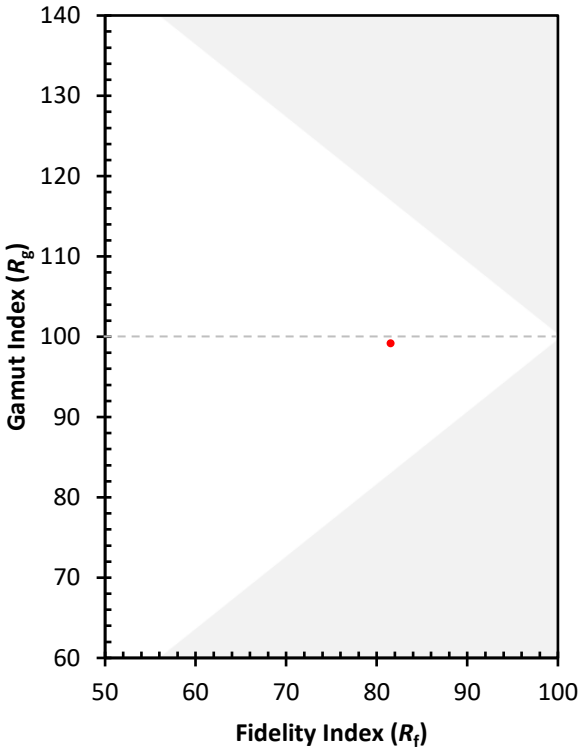
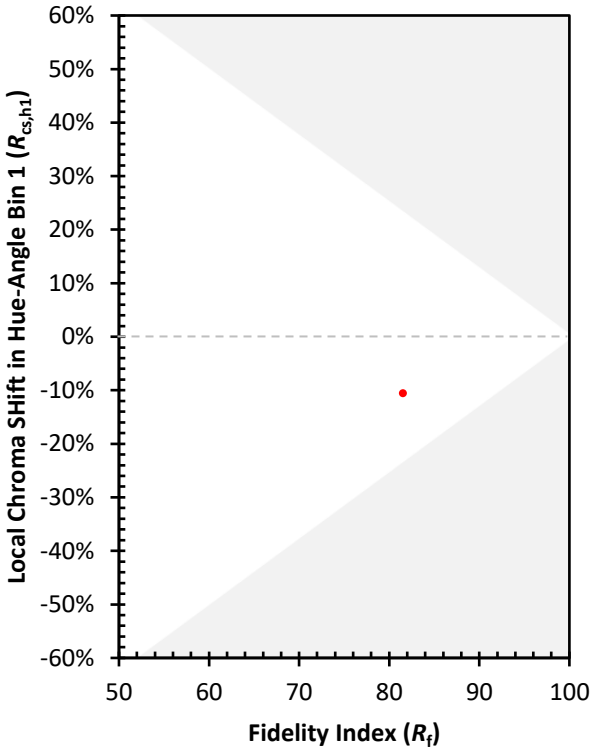
Measure Comparisons





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