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: P638000

Luminaire Tested: GWS-SA4D-830-U-T2R-W

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:	P638000
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-11)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4D-830-U-T2R-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19836.6 lumens
Efficiency:	N/A
Efficacy:	122.4 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G2

Input Watts (W):	162.1
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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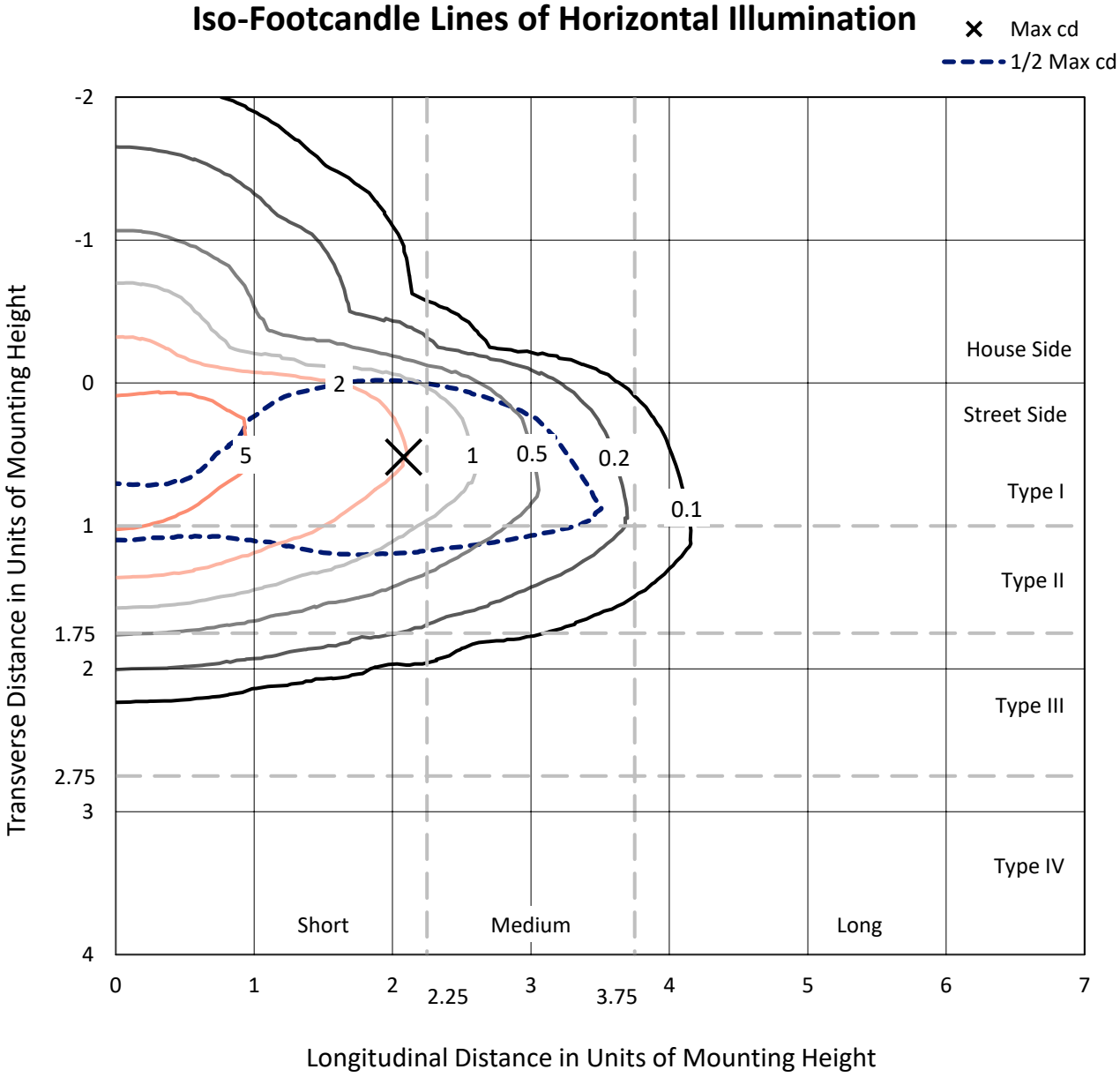
Scaled Data Report

REPORT NUMBER: P638000
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
Type II - Short - N/A

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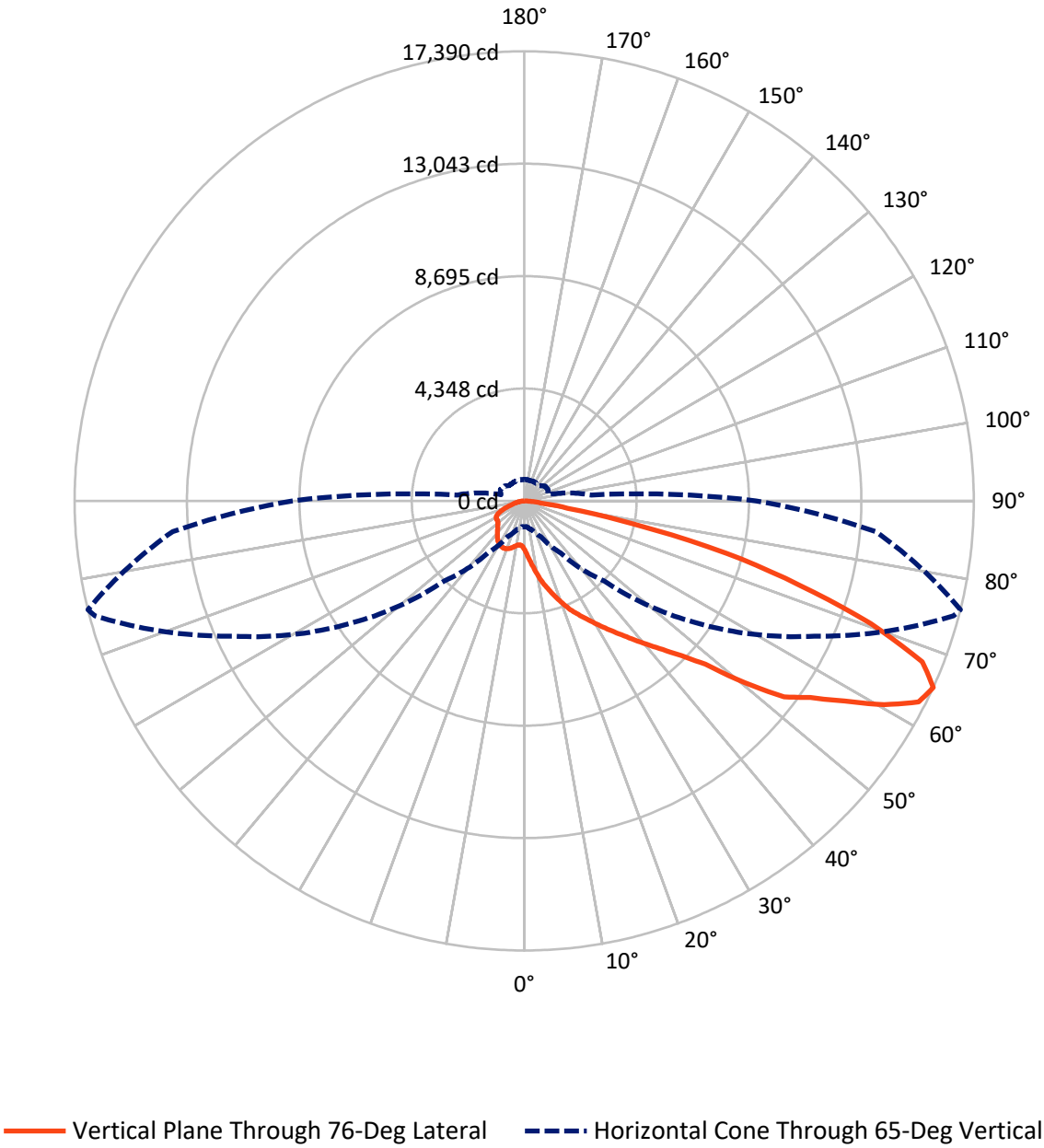
Luminous Intensity Polar Plot



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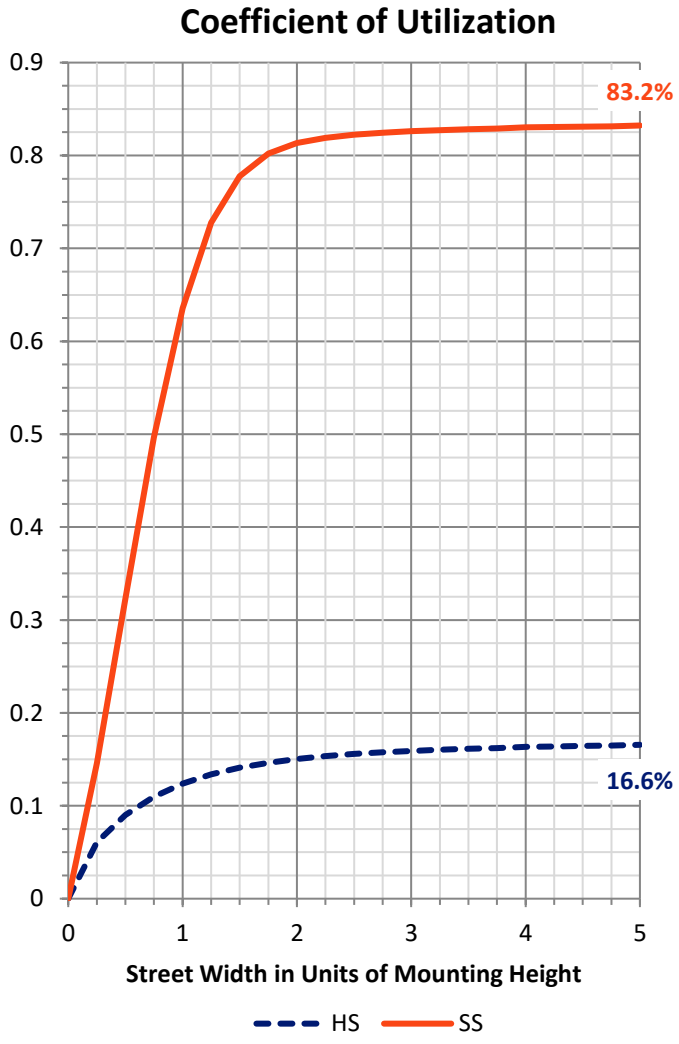
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3315.7	0.0	3315.7
	% Fixture	16.7	0.0	16.7
Street Side	Lumens	16520.9	0.0	16520.9
	% Fixture	83.3	0.0	83.3
Total	Lumens	19836.6	0.0	19836.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.2	1.1
10°-20°	850.0	4.3
20°-30°	1656.6	8.4
30°-40°	2770.6	14.0
40°-50°	3966.9	20.0
50°-60°	4696.3	23.7
60°-70°	3905.0	19.7
70°-80°	1598.0	8.1
80°-90°	170.1	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°	19836.6	100.0
0°-180°	19836.6	100.0



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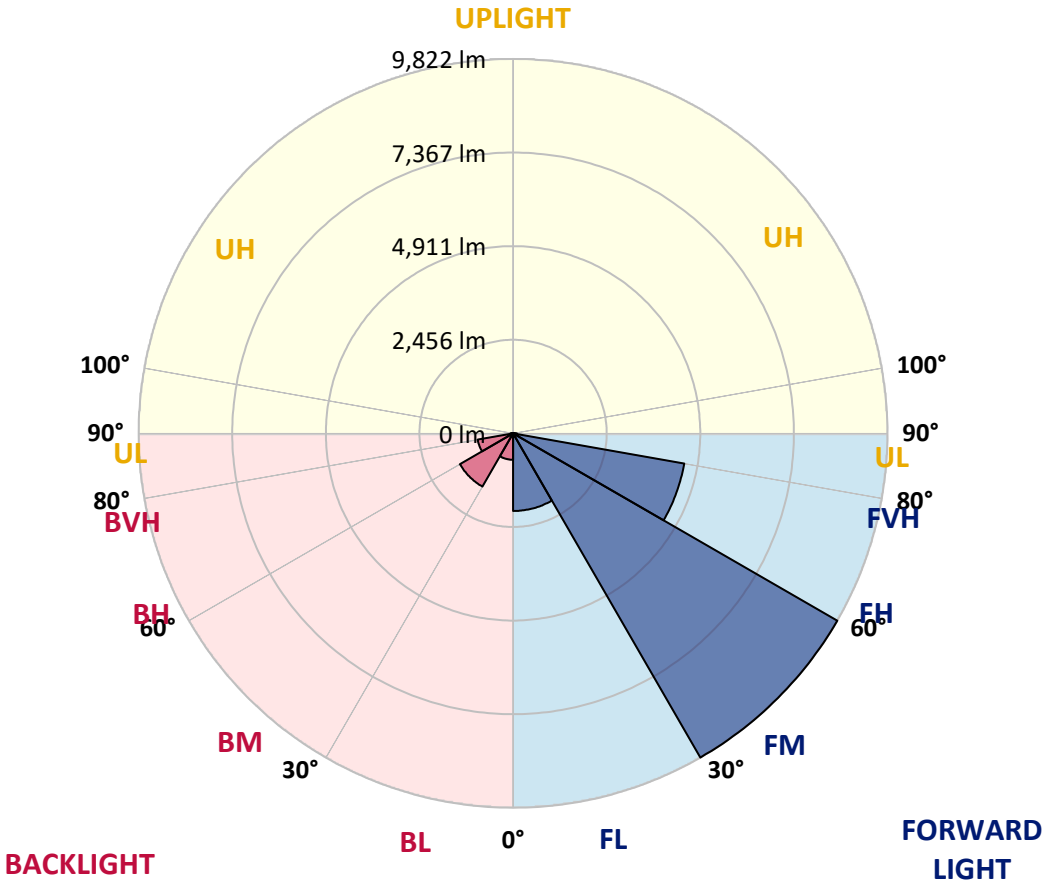
REPORT NUMBER: P638000
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2036.2	10.3			
FM	(30°-60°)	9822.3	49.5			
FH	(60°-80°)	4560.9	23.0			G2/5000
FVH	(80°-90°)	101.5	0.5			G2/225
BL	(0°-30°)	693.6	3.5	B2/1000		
BM	(30°-60°)	1611.4	8.1	B2/2500		
BH	(60°-80°)	942.0	4.7	B2/1000		G2/1000
BVH	(80°-90°)	68.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
Type II Short



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REPORT NUMBER: P638000
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1878.5	1878.5	1878.5	1878.5	1878.5	1878.5	1878.5	1878.5	1878.5	*1878.5*	1878.5
2.5°	2632.9	2642.7	2610.6	2599.4	2524.1	2422.3	2337.3	2209.0	2090.4	*2072.3*	1966.3
5°	3344.1	3302.3	3266.0	3242.3	3137.7	3022.0	2842.1	2600.8	2348.4	*2317.7*	2089.0
7.5°	3766.7	3759.7	3715.1	3701.1	3620.2	3504.5	3319.0	3019.2	2652.4	*2602.2*	2255.0
10°	4105.5	4101.4	4079.0	4091.6	4017.7	3904.7	3724.8	3415.2	2985.7	*2935.5*	2440.5
12.5°	4401.2	4408.2	4404.0	4450.0	4412.3	4324.5	4137.6	3797.3	3319.0	*3264.6*	2666.4
15°	4617.3	4622.9	4643.8	4744.2	4765.2	4747.0	4557.4	4172.5	3648.1	*3570.0*	2899.3
17.5°	4678.7	4689.9	4740.1	4901.8	5014.8	5090.1	4949.2	4554.6	3971.7	*3886.6*	3136.3
20°	4761.0	4773.5	4823.7	4992.5	5158.4	5330.0	5304.9	4942.3	4298.0	*4228.3*	3376.2
22.5°	5141.7	5131.9	5109.6	5190.5	5309.0	5522.4	5585.2	5314.6	4635.5	*4568.5*	3641.2
25°	5875.2	5857.1	5714.8	5640.9	5601.9	5731.6	5843.1	5653.5	4964.6	*4864.2*	3888.0
27.5°	6684.1	6674.3	6493.0	6317.3	6077.4	6021.6	6087.2	5949.1	5283.9	*5182.1*	4102.8
30°	7449.7	7420.4	7230.7	7010.4	6689.6	6449.8	6353.5	6239.2	5634.0	*5528.0*	4353.8
32.5°	8134.4	8096.7	7873.6	7629.6	7293.5	7010.4	6723.1	6547.4	6030.0	*5907.3*	4610.4
35°	8696.4	8658.7	8430.0	8170.6	7801.1	7591.9	7198.6	6882.1	6433.0	*6308.9*	4913.0
37.5°	9131.5	9096.6	8858.2	8603.0	8280.8	8114.9	7773.2	7258.6	6897.4	*6767.7*	5233.7
40°	9375.5	9350.4	9159.4	8957.2	8686.6	8543.0	8389.6	7734.1	7417.6	*7287.9*	5611.7
42.5°	9449.4	9432.7	9298.8	9194.2	9011.6	8902.8	8990.6	8293.4	7972.6	*7859.7*	6037.0
45°	9264.0	9264.0	9224.9	9277.9	9286.3	9284.9	9593.1	8925.1	8654.5	*8530.4*	6636.6
47.5°	8789.8	8820.5	8877.7	9138.5	9413.2	9643.3	10297.3	9767.4	9531.7	*9429.9*	7485.9
50°	7922.4	8006.1	8201.3	8710.3	9294.6	9880.4	10963.9	11012.7	11237.2	*11057.4*	8735.4
52.5°	6652.0	6639.4	7137.3	7862.4	8753.6	9890.1	11330.7	12111.6	12715.5	*12591.4*	9664.2
55°	5286.7	5265.8	5730.2	6730.1	7923.8	9516.4	11551.0	12615.1	13535.5	*13423.9*	10499.5
57.5°	4048.4	4021.9	4434.7	5336.9	6752.4	8722.9	11509.2	13214.7	14663.6	*14606.5*	11634.7
60°	2786.3	2754.2	3140.5	3929.8	5366.2	7509.6	11046.2	13522.9	15984.3	*16003.8*	12849.3
62.5°	1673.5	1655.3	1935.6	2547.8	3860.1	6006.3	9962.6	13336.0	17035.8	*17123.6*	13630.3
65°	*1009.7*	*997.1*	*1161.7*	*1520.1*	*2448.8*	*4383.1*	*8292.0*	*12380.8*	*17187.8*	*17390.0*	*13648.4*
67.5°	734.9	736.3	783.7	926.0	1428.0	2830.9	6222.5	10668.3	16395.7	*16604.9*	12788.0
70°	638.7	641.5	666.6	698.7	863.2	1620.5	4045.6	8421.7	14054.2	*14216.0*	10725.4
72.5°	567.6	567.6	584.3	601.0	675.0	987.3	2167.1	5886.4	11092.2	*11135.4*	8186.0
75°	499.2	495.1	503.4	511.8	585.7	690.3	1054.3	4101.4	8193.0	*8092.5*	5290.9
77.5°	397.4	393.3	394.7	403.0	470.0	493.7	534.1	2561.8	4617.3	*4358.0*	2337.3
80°	283.1	280.3	295.6	316.6	347.2	302.6	334.7	1239.8	1831.0	*1704.1*	906.5
82.5°	168.7	174.3	198.0	214.8	239.9	189.7	216.2	414.2	648.5	*631.7*	368.2
85°	23.7	25.1	71.1	82.3	103.2	73.9	114.4	186.9	259.4	*277.5*	129.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	9.8	33.5	73.9	*75.3*	32.1
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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Scaled Data Report

REPORT NUMBER: P638000
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1878.5	1878.5	1878.5	1878.5	1878.5	1878.5	1878.5	1878.5	1878.5	1878.5	1878.5
2.5°	1911.9	1846.4	1752.9	1674.8	1609.3	1556.3	1511.7	1478.2	1468.5	1454.5	1454.5
5°	1981.6	1863.1	1695.8	1577.2	1508.9	1468.5	1440.6	1426.6	1419.6	1411.3	1407.1
7.5°	2077.9	1911.9	1686.0	1566.1	1513.1	1488.0	1469.9	1461.5	1455.9	1447.5	1447.5
10°	2210.4	1984.4	1716.7	1605.1	1563.3	1538.2	1517.3	1503.3	1490.8	1478.2	1475.4
12.5°	2354.0	2079.3	1772.5	1658.1	1613.5	1582.8	1553.5	1532.6	1517.3	1501.9	1497.7
15°	2513.0	2176.9	1832.4	1709.7	1653.9	1612.1	1577.2	1545.2	1524.2	1501.9	1499.1
17.5°	2669.2	2275.9	1882.6	1744.6	1673.5	1621.9	1571.7	1529.8	1503.3	1478.2	1471.2
20°	2856.0	2374.9	1917.5	1754.3	1669.3	1600.9	1541.0	1488.0	1458.7	1429.4	1425.2
22.5°	3027.6	2467.0	1934.2	1740.4	1637.2	1556.3	1486.6	1429.4	1397.3	1368.0	1362.5
25°	3193.5	2547.8	1927.3	1706.9	1588.4	1495.0	1422.4	1365.3	1334.6	1303.9	1295.5
27.5°	3353.9	2602.2	1899.4	1655.3	1527.0	1426.6	1356.9	1305.3	1278.8	1252.3	1241.1
30°	3511.5	2652.4	1856.1	1588.4	1448.9	1355.5	1298.3	1262.1	1235.6	1207.7	1199.3
32.5°	3670.4	2688.7	1790.6	1510.3	1369.4	1292.7	1257.9	1231.4	1203.5	1175.6	1167.2
35°	3830.8	2704.0	1711.1	1421.0	1302.5	1252.3	1239.8	1209.1	1171.4	1137.9	1126.8
37.5°	4021.9	2718.0	1612.1	1333.2	1243.9	1232.8	1230.0	1184.0	1139.3	1093.3	1080.8
40°	4252.0	2736.1	1510.3	1253.7	1196.5	1225.8	1214.6	1151.9	1062.6	1018.0	1004.1
42.5°	4533.7	2769.6	1404.3	1181.2	1161.7	1199.3	1186.8	1073.8	1013.8	988.7	981.8
45°	4947.8	2892.3	1298.3	1124.0	1135.2	1161.7	1142.1	1027.8	1004.1	987.3	979.0
47.5°	5685.6	3080.6	1206.3	1080.8	1114.2	1128.2	1052.9	1015.2	997.1	974.8	965.0
50°	6452.6	3162.8	1132.4	1054.3	1090.5	1097.5	1004.1	998.5	985.9	962.2	952.5
52.5°	6971.3	3151.7	1087.7	1044.5	1071.0	1044.5	981.8	980.4	972.0	944.1	933.0
55°	7557.0	3171.2	1068.2	1047.3	1062.6	955.3	953.9	958.1	953.9	923.2	917.6
57.5°	8347.7	3231.2	1058.5	1057.1	1057.1	912.0	927.4	933.0	924.6	910.6	906.5
60°	9107.8	3235.3	1040.3	1068.2	1052.9	885.5	896.7	902.3	892.5	889.7	888.3
62.5°	9393.7	3034.5	999.9	1059.9	1036.1	856.3	864.6	867.4	857.6	864.6	863.2
65°	*8968.3*	*2607.8*	*933.0*	*1019.4*	*984.5*	*829.8*	*824.2*	*831.1*	*814.4*	*832.5*	*833.9*
67.5°	7962.9	2072.3	831.1	942.7	912.0	800.5	789.3	789.3	761.4	789.3	787.9
70°	6420.5	1464.3	681.9	820.0	832.5	765.6	760.0	728.0	683.3	725.2	721.0
72.5°	4867.0	1051.5	536.9	648.5	716.8	716.8	718.2	663.8	612.2	631.7	615.0
75°	3083.3	740.5	429.5	496.5	562.0	628.9	661.0	560.6	514.6	506.2	497.9
77.5°	1389.0	486.7	334.7	380.7	398.8	496.5	603.8	482.5	419.8	401.6	396.1
80°	581.5	302.6	238.5	269.1	245.4	417.0	532.7	375.1	308.2	283.1	265.0
82.5°	255.2	179.9	152.0	145.0	153.4	309.6	397.4	249.6	192.4	260.8	263.6
85°	107.4	94.8	78.1	71.1	62.8	118.5	186.9	97.6	119.9	68.3	55.8
87.5°	25.1	27.9	20.9	13.9	8.4	1.4	0.0	0.0	0.0	0.0	0.0
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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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

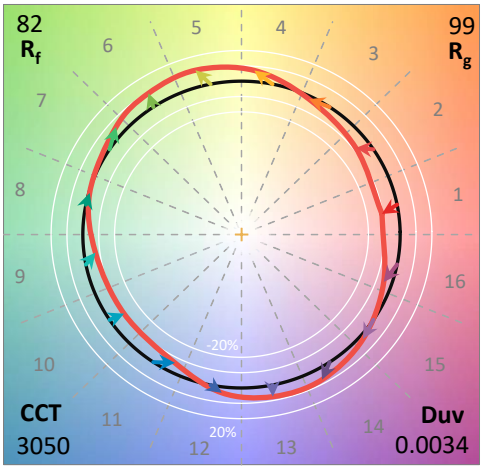
Test Information

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

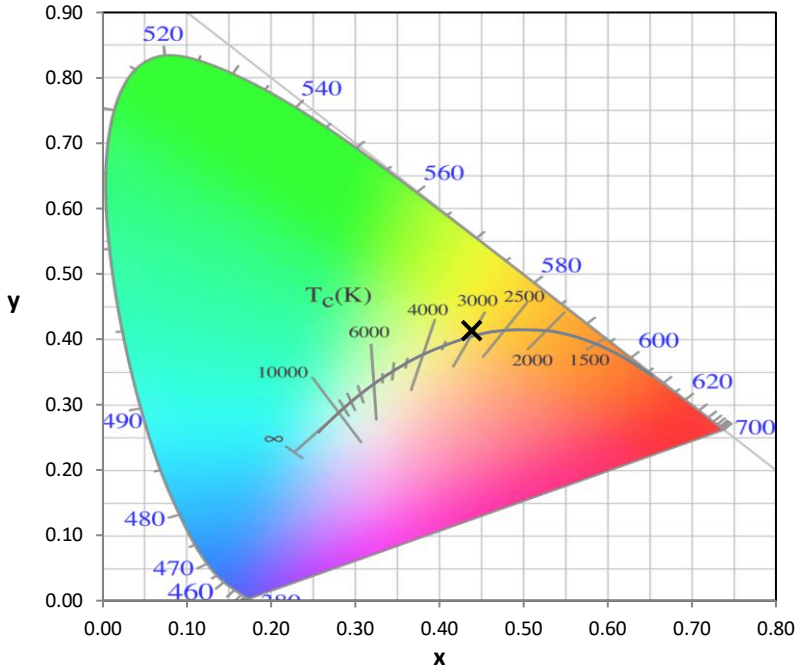
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

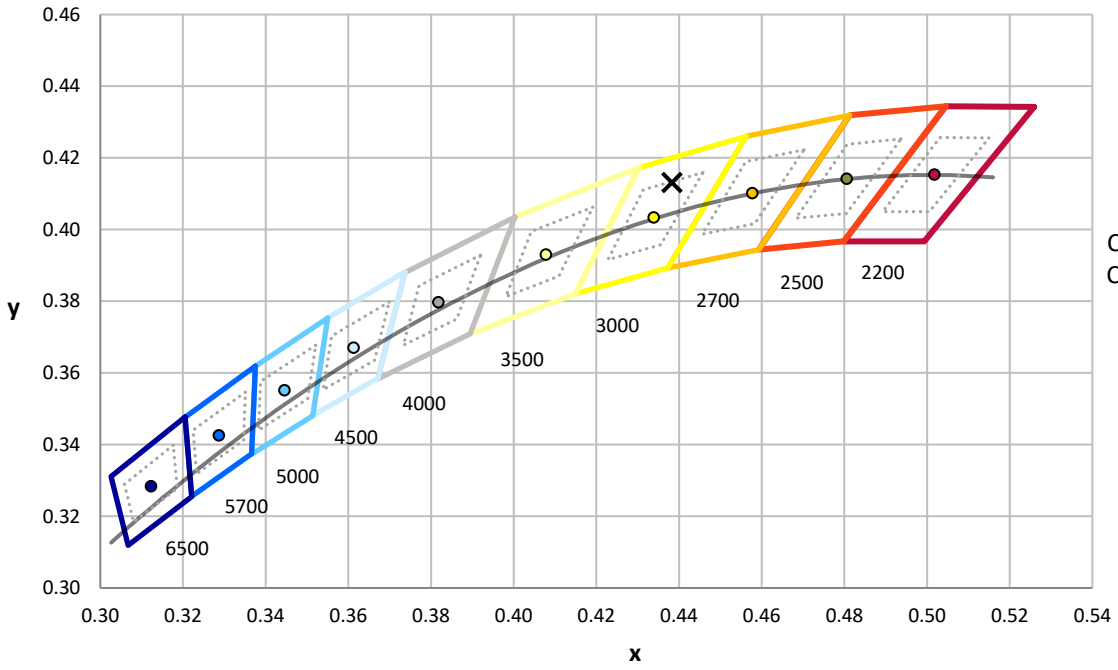
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

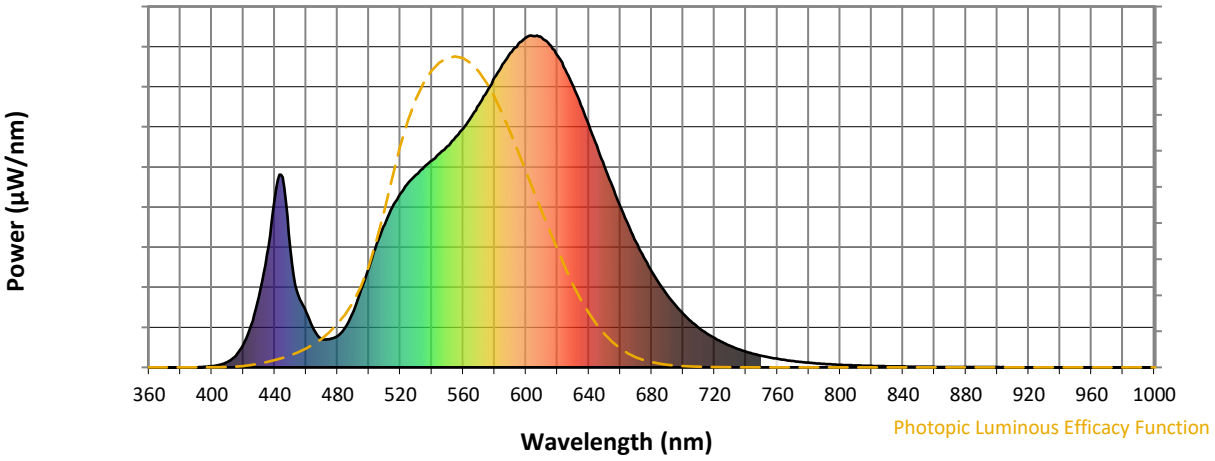


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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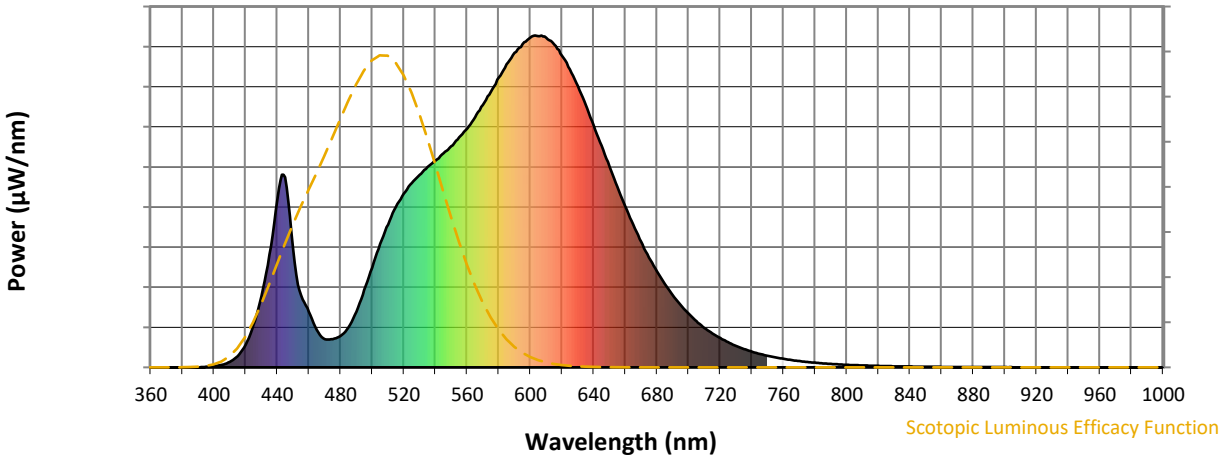
Scotopic Flux vs. Wavelength



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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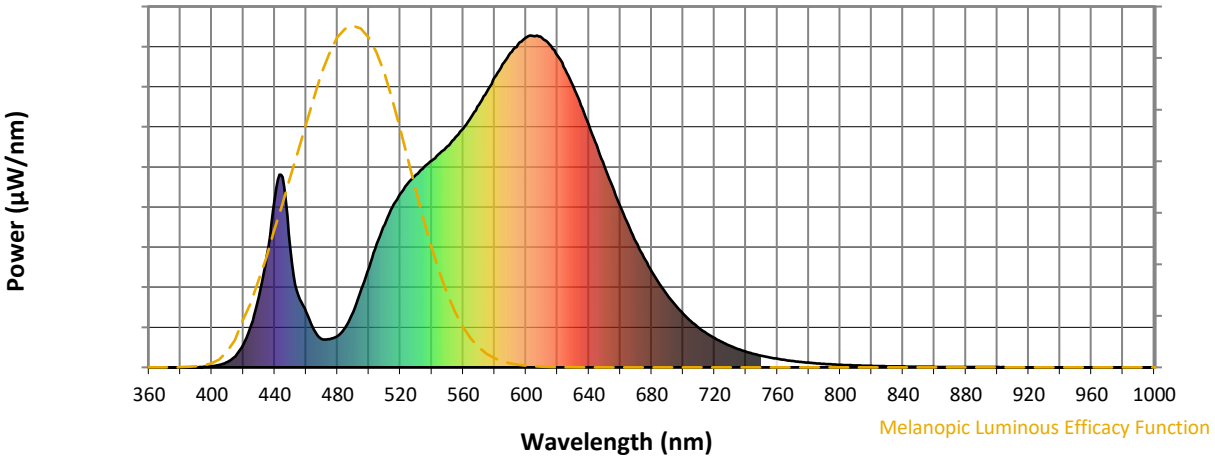
Melanopic Flux vs. Wavelength



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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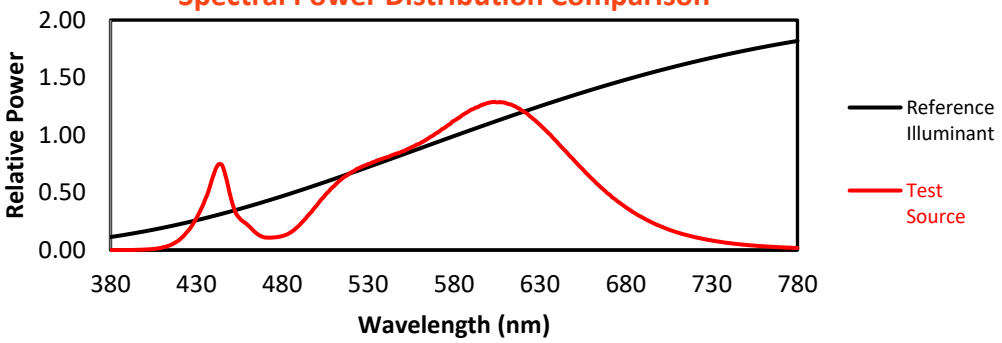
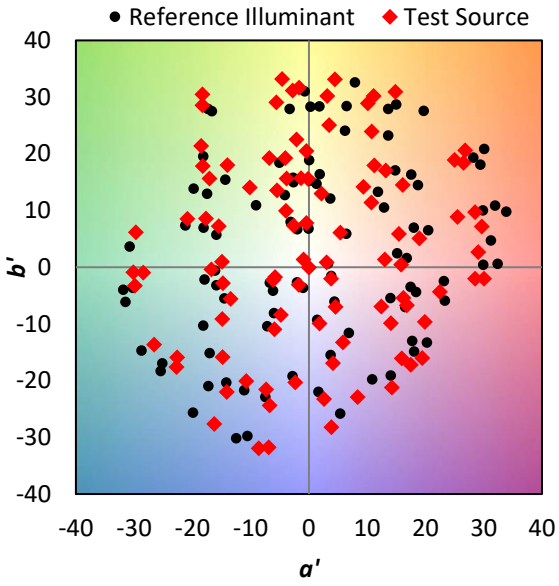
Summary

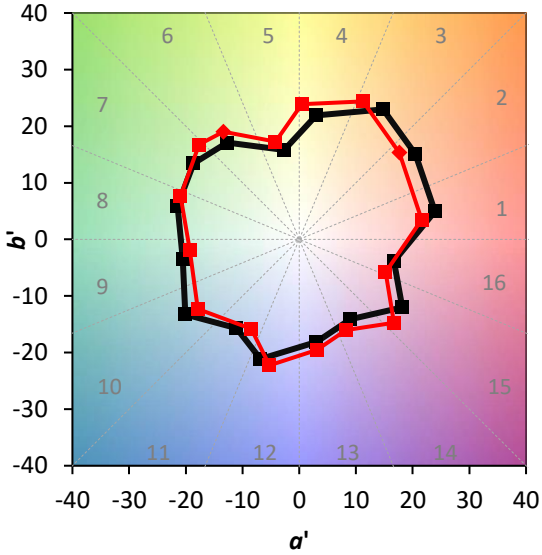
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

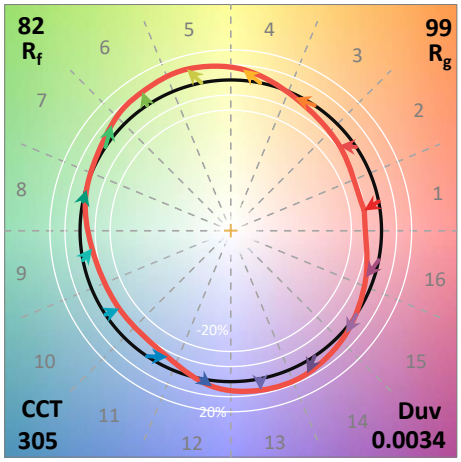
Spectral Power Distribution Comparison

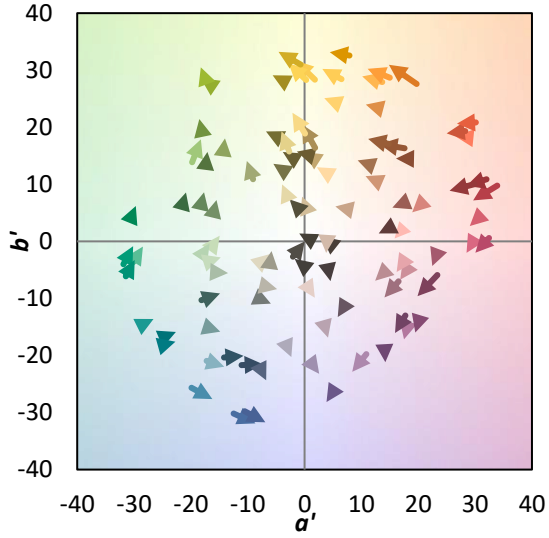


Color Vector Graphics









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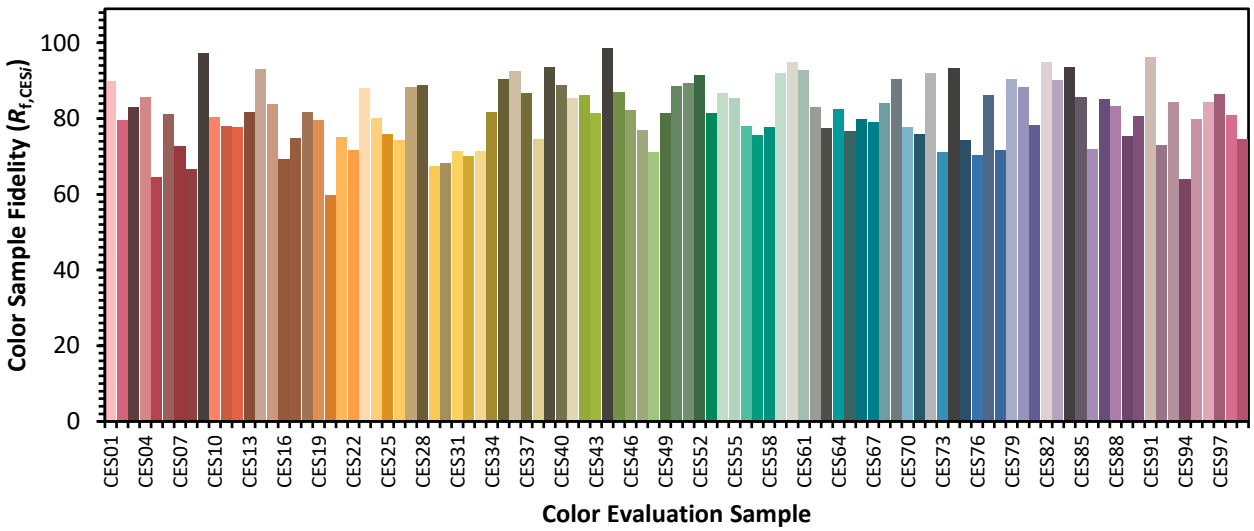
Individual Sample Fidelity Index ($R_{f,i}$)

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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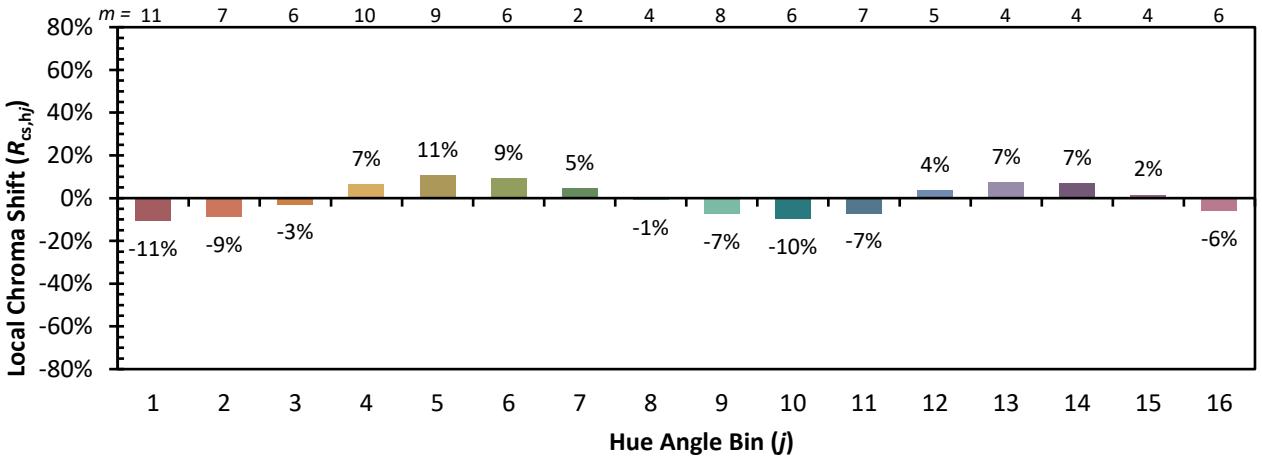
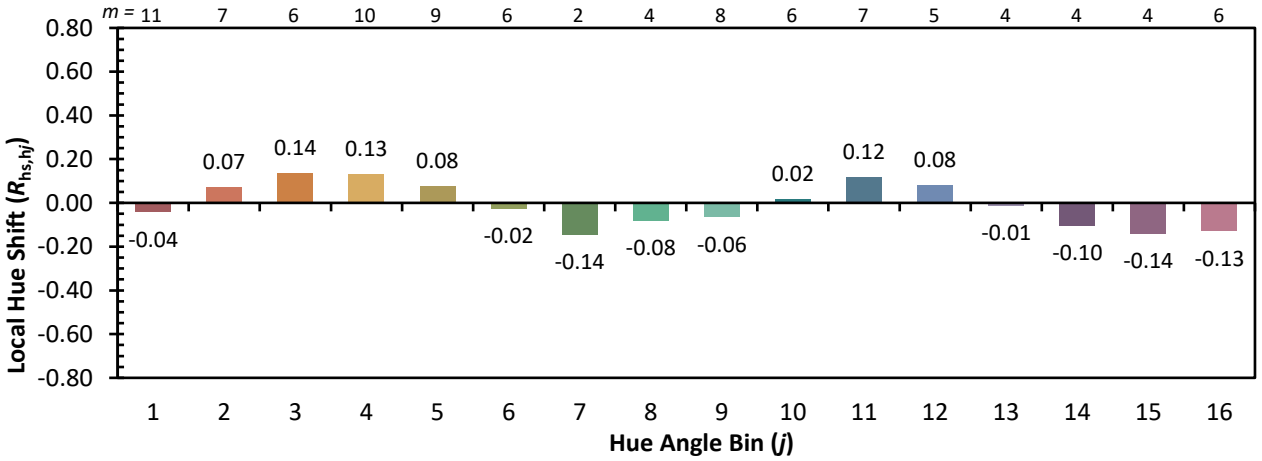
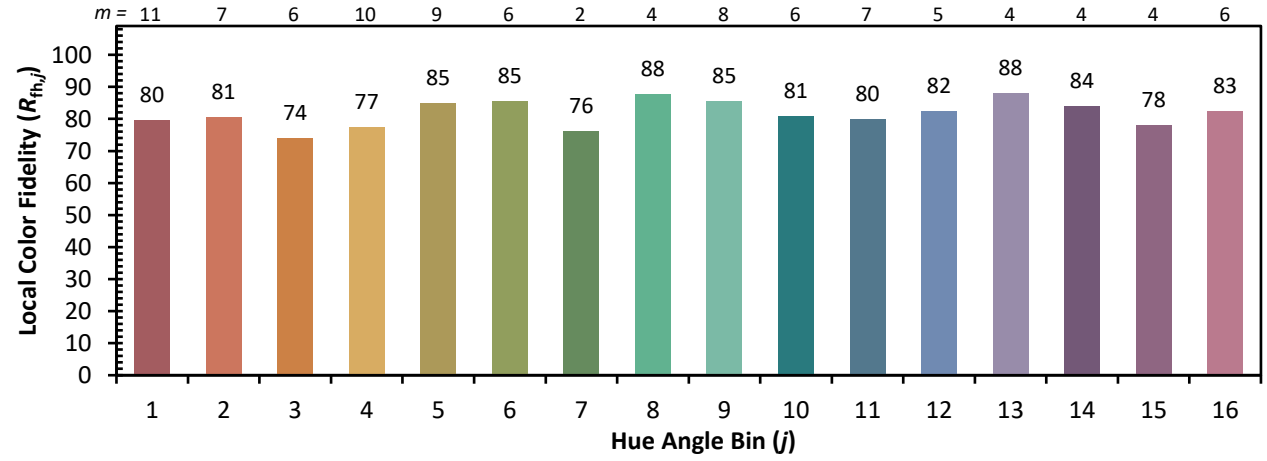
Color Rendition by Hue-Angle Bin







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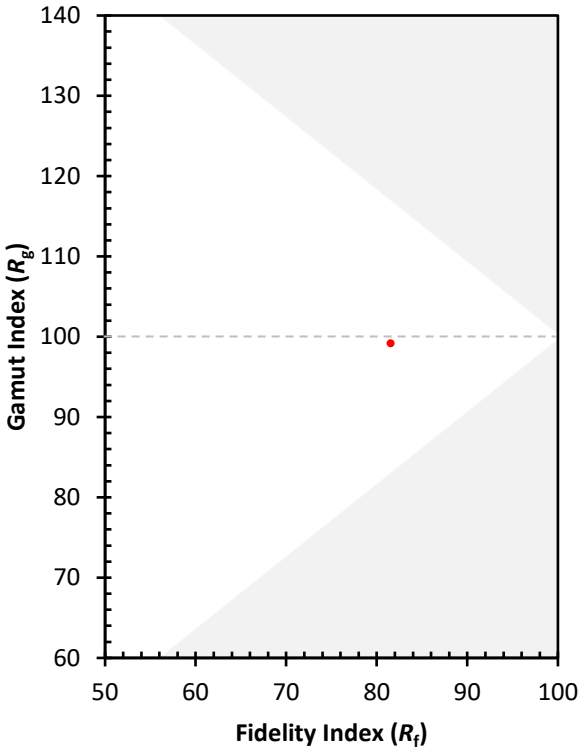
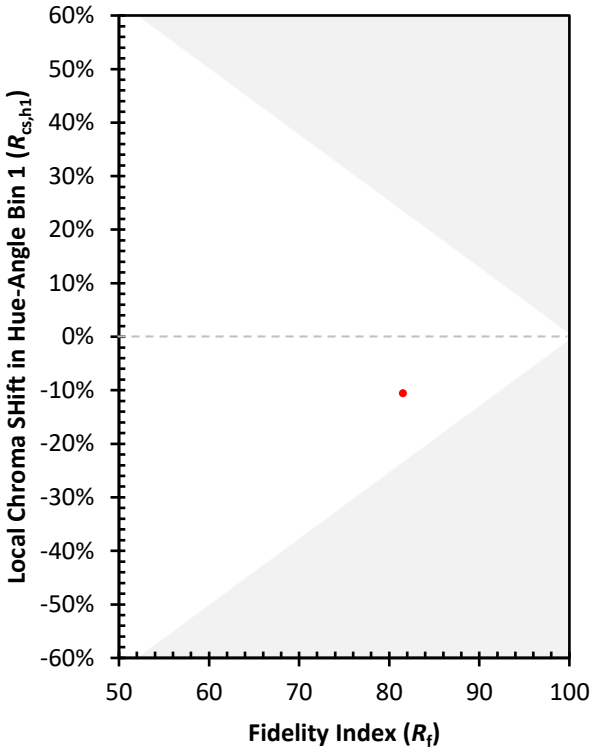
Measure Comparisons





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