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: P633050

Luminaire Tested: GWS-SA2D-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:	P633050
	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-SA2D-830-U-T2R-W
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	9457.9 lumens
Efficiency:	N/A
Efficacy:	115.2 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	82.1
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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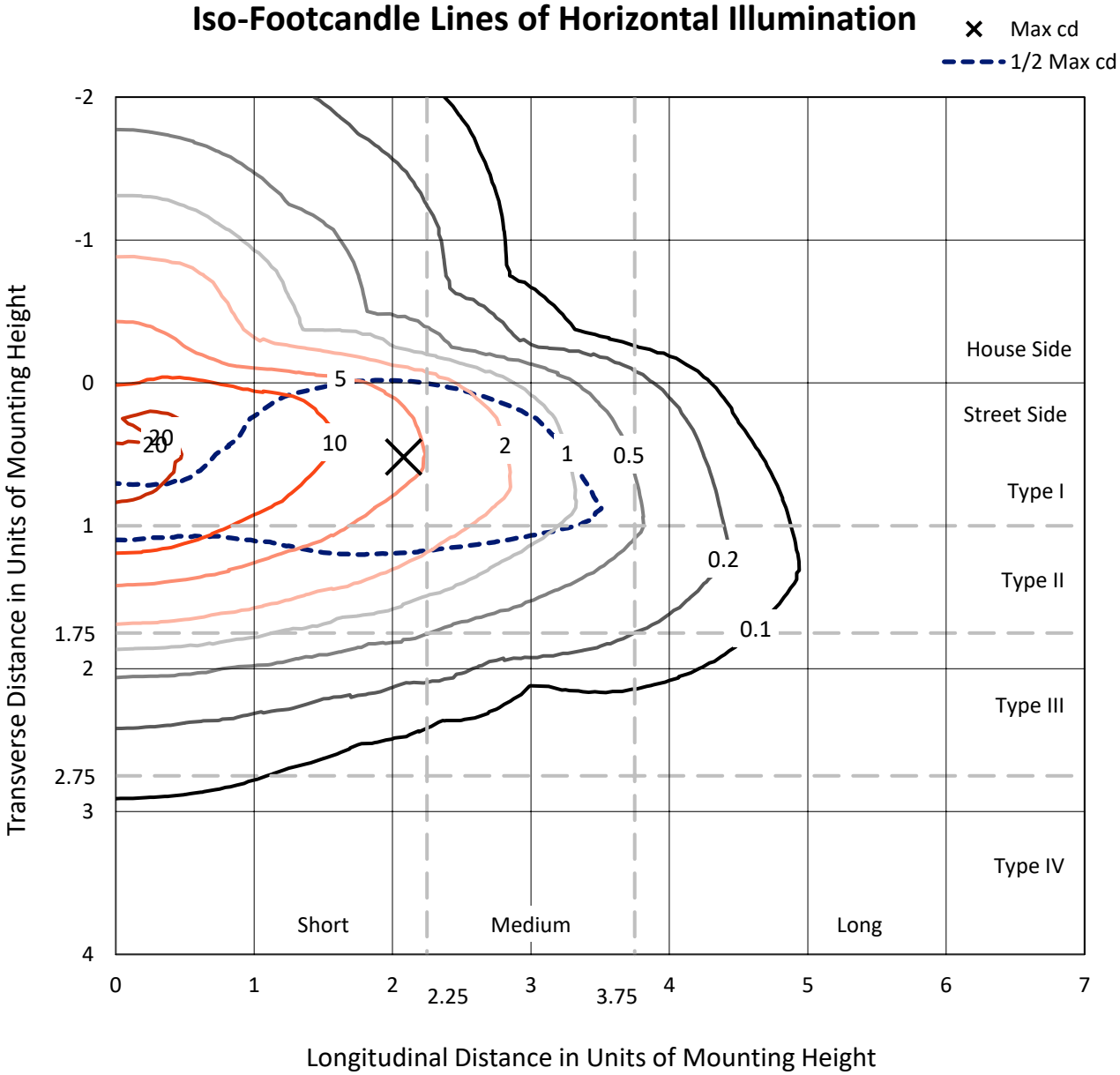
Scaled Data Report

REPORT NUMBER: P633050
CATALOG NUMBER: GWS-SA2D-830-U-T2R-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 23.3 fc
Type II - Short - N/A

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REPORT NUMBER: P633050
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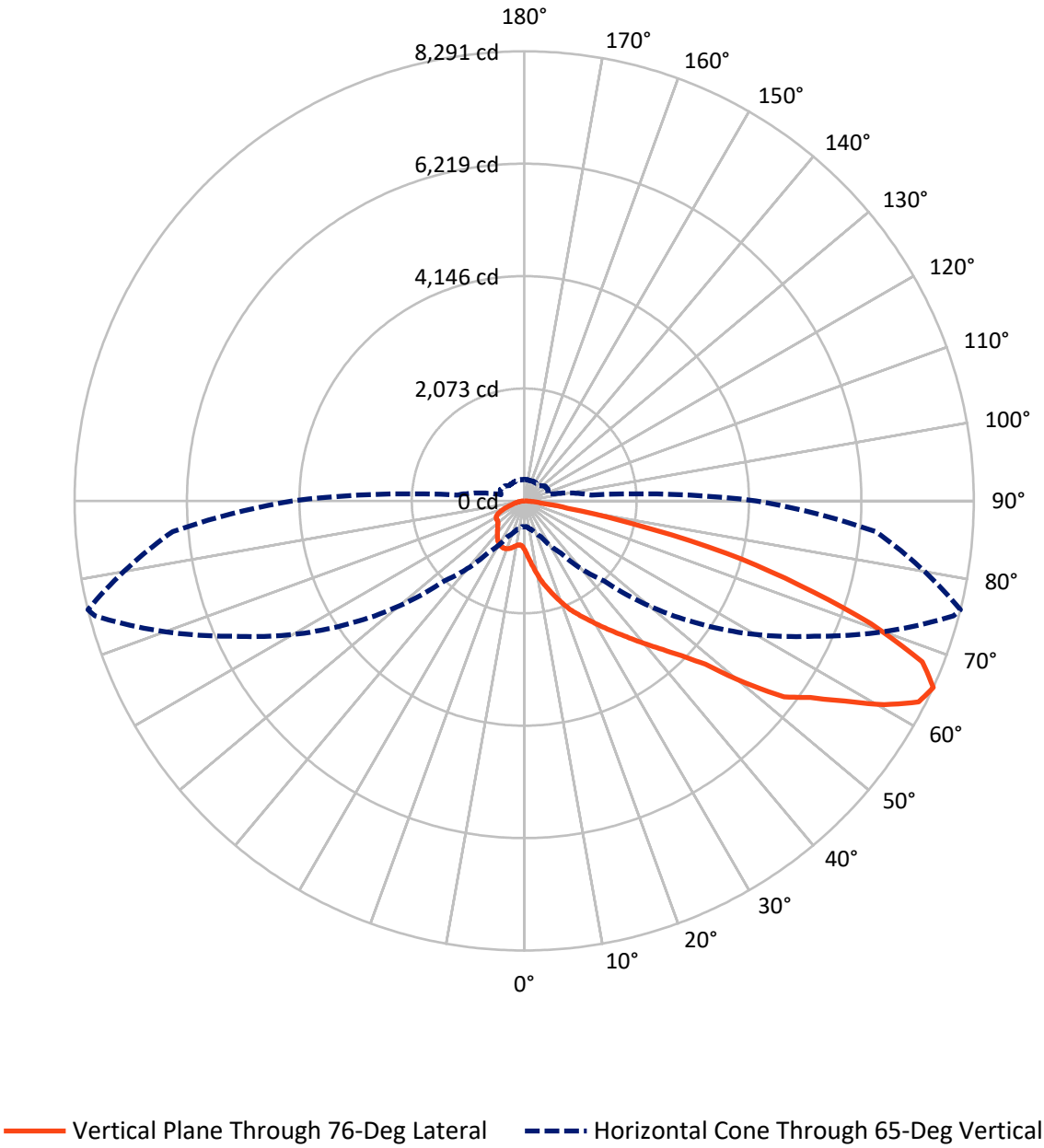
Luminous Intensity Polar Plot



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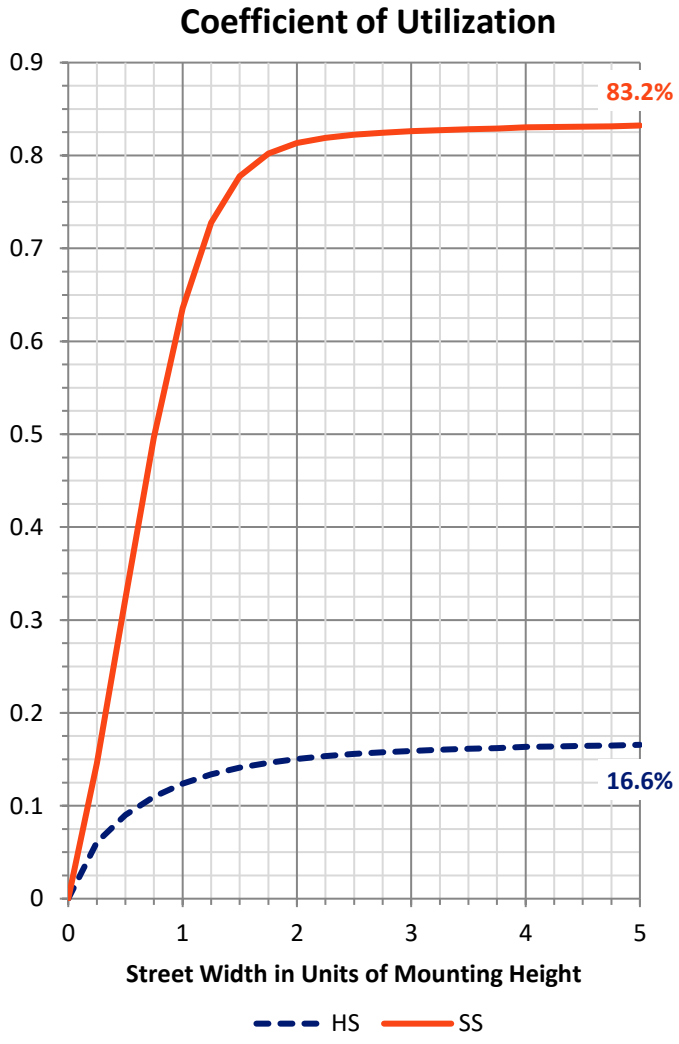
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1580.9	0.0	1580.9
	% Fixture	16.7	0.0	16.7
Street Side	Lumens	7877.0	0.0	7877.0
	% Fixture	83.3	0.0	83.3
Total	Lumens	9457.9	0.0	9457.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.4	1.1
10°-20°	405.3	4.3
20°-30°	789.8	8.4
30°-40°	1321.0	14.0
40°-50°	1891.4	20.0
50°-60°	2239.1	23.7
60°-70°	1861.8	19.7
70°-80°	761.9	8.1
80°-90°	81.1	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°	9457.9	100.0
0°-180°	9457.9	100.0



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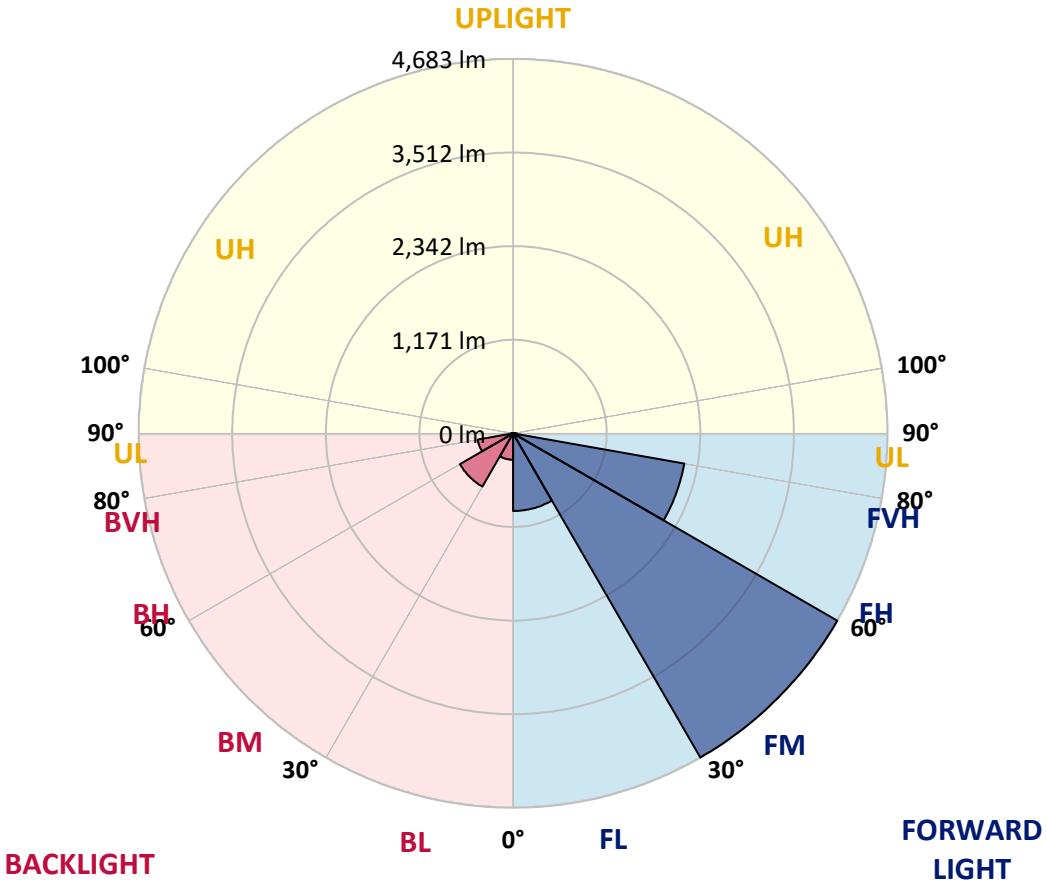
CATALOG NUMBER: GWS-SA2D-830-U-T2R-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	970.8	10.3			
FM	(30°-60°)	4683.2	49.5			
FH	(60°-80°)	2174.6	23.0			G2/5000
FVH	(80°-90°)	48.4	0.5			G1/100
BL	(0°-30°)	330.7	3.5	B1/500		
BM	(30°-60°)	768.3	8.1	B1/1000		
BH	(60°-80°)	449.2	4.7	B1/500		G1/500
BVH	(80°-90°)	32.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type II Short



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Scaled Data Report

REPORT NUMBER: P633050
CATALOG NUMBER: GWS-SA2D-830-U-T2R-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	895.6	895.6	895.6	895.6	895.6	895.6	895.6	895.6	895.6	*895.6*	895.6
2.5°	1255.3	1260.0	1244.7	1239.4	1203.5	1154.9	1114.4	1053.2	996.7	*988.1*	937.5
5°	1594.4	1574.5	1557.2	1545.9	1496.0	1440.9	1355.1	1240.0	1119.7	*1105.1*	996.0
7.5°	1795.9	1792.6	1771.3	1764.7	1726.1	1670.9	1582.5	1439.5	1264.7	*1240.7*	1075.2
10°	1957.5	1955.5	1944.8	1950.8	1915.6	1861.7	1776.0	1628.4	1423.6	*1399.6*	1163.6
12.5°	2098.4	2101.8	2099.8	2121.7	2103.8	2061.9	1972.8	1810.5	1582.5	*1556.5*	1271.3
15°	2201.5	2204.2	2214.1	2262.0	2272.0	2263.3	2172.9	1989.4	1739.4	*1702.2*	1382.3
17.5°	2230.8	2236.1	2260.0	2337.1	2391.0	2426.9	2359.8	2171.6	1893.7	*1853.1*	1495.4
20°	2270.0	2276.0	2299.9	2380.4	2459.5	2541.3	2529.3	2356.4	2049.2	*2016.0*	1609.7
22.5°	2451.5	2446.9	2436.2	2474.8	2531.3	2633.0	2662.9	2534.0	2210.1	*2178.2*	1736.1
25°	2801.2	2792.6	2724.8	2689.5	2670.9	2732.8	2786.0	2695.5	2367.1	*2319.2*	1853.8
27.5°	3186.9	3182.2	3095.8	3012.0	2897.7	2871.1	2902.3	2836.5	2519.3	*2470.8*	1956.2
30°	3551.9	3538.0	3447.5	3342.5	3189.6	3075.2	3029.3	2974.8	2686.2	*2635.7*	2075.8
32.5°	3878.4	3860.4	3754.1	3637.7	3477.5	3342.5	3205.5	3121.7	2875.1	*2816.5*	2198.2
35°	4146.4	4128.4	4019.4	3895.7	3719.5	3619.7	3432.2	3281.3	3067.2	*3008.0*	2342.5
37.5°	4353.8	4337.2	4223.5	4101.8	3948.2	3869.1	3706.2	3460.8	3288.6	*3226.8*	2495.4
40°	4470.2	4458.2	4367.1	4270.7	4141.7	4073.2	4000.1	3687.6	3536.6	*3474.8*	2675.6
42.5°	4505.4	4497.4	4433.6	4383.7	4296.6	4244.8	4286.6	3954.2	3801.3	*3747.4*	2878.4
45°	4417.0	4417.0	4398.4	4423.6	4427.6	4426.9	4573.9	4255.4	4126.4	*4067.2*	3164.3
47.5°	4190.9	4205.5	4232.8	4357.1	4488.1	4597.8	4909.7	4657.0	4544.6	*4496.1*	3569.2
50°	3777.3	3817.2	3910.3	4153.0	4431.6	4710.9	5227.5	5250.8	5357.8	*5272.0*	4165.0
52.5°	3171.6	3165.6	3403.0	3748.7	4173.6	4715.5	5402.4	5774.7	6062.6	*6003.4*	4607.8
55°	2520.7	2510.7	2732.1	3208.8	3778.0	4537.3	5507.4	6014.7	6453.6	*6400.4*	5006.1
57.5°	1930.2	1917.6	2114.4	2544.6	3219.5	4159.0	5487.5	6300.6	6991.5	*6964.2*	5547.3
60°	1328.5	1313.2	1497.4	1873.7	2558.6	3580.5	5266.7	6447.6	7621.2	*7630.5*	6126.4
62.5°	797.9	789.2	922.9	1214.8	1840.5	2863.7	4750.1	6358.5	8122.5	*8164.4*	6498.8
65°	*481.4*	*475.4*	*553.9*	*724.7*	*1167.6*	*2089.8*	*3953.5*	*5903.0*	*8195.0*	*8291.4*	*6507.4*
67.5°	350.4	351.1	373.7	441.5	680.9	1349.8	2966.8	5086.5	7817.3	*7917.0*	6097.2
70°	304.5	305.9	317.8	333.1	411.6	772.6	1928.9	4015.4	6700.9	*6778.1*	5113.8
72.5°	270.6	270.6	278.6	286.6	321.8	470.8	1033.3	2806.6	5288.7	*5309.3*	3903.0
75°	238.0	236.0	240.0	244.0	279.3	329.1	502.7	1955.5	3906.3	*3858.4*	2522.7
77.5°	189.5	187.5	188.2	192.2	224.1	235.4	254.7	1221.4	2201.5	*2077.8*	1114.4
80°	135.0	133.6	141.0	150.9	165.6	144.3	159.6	591.1	873.0	*812.5*	432.2
82.5°	80.5	83.1	94.4	102.4	114.4	90.4	103.1	197.5	309.2	*301.2*	175.5
85°	11.3	12.0	33.9	39.2	49.2	35.2	54.5	89.1	123.7	*132.3*	61.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	4.7	16.0	35.2	*35.9*	15.3
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: P633050
CATALOG NUMBER: GWS-SA2D-830-U-T2R-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	895.6	895.6	895.6	895.6	895.6	895.6	895.6	895.6	895.6	895.6	895.6
2.5°	911.6	880.3	835.8	798.6	767.3	742.0	720.8	704.8	700.1	693.5	693.5
5°	944.8	888.3	808.5	752.0	719.4	700.1	686.8	680.2	676.9	672.9	670.9
7.5°	990.7	911.6	803.9	746.7	721.4	709.5	700.8	696.8	694.2	690.2	690.2
10°	1053.9	946.2	818.5	765.3	745.4	733.4	723.4	716.8	710.8	704.8	703.5
12.5°	1122.4	991.4	845.1	790.6	769.3	754.7	740.7	730.7	723.4	716.1	714.1
15°	1198.2	1037.9	873.7	815.2	788.6	768.6	752.0	736.7	726.7	716.1	714.8
17.5°	1272.6	1085.1	897.6	831.8	797.9	773.3	749.3	729.4	716.8	704.8	701.5
20°	1361.7	1132.3	914.2	836.5	795.9	763.3	734.7	709.5	695.5	681.5	679.5
22.5°	1443.5	1176.2	922.2	829.8	780.6	742.0	708.8	681.5	666.2	652.3	649.6
25°	1522.6	1214.8	918.9	813.8	757.3	712.8	678.2	650.9	636.3	621.7	617.7
27.5°	1599.1	1240.7	905.6	789.2	728.1	680.2	647.0	622.4	609.7	597.1	591.8
30°	1674.2	1264.7	885.0	757.3	690.8	646.3	619.0	601.7	589.1	575.8	571.8
32.5°	1750.0	1281.9	853.7	720.1	652.9	616.4	599.7	587.1	573.8	560.5	556.5
35°	1826.5	1289.3	815.8	677.5	621.0	597.1	591.1	576.5	558.5	542.6	537.2
37.5°	1917.6	1295.9	768.6	635.6	593.1	587.8	586.4	564.5	543.2	521.3	515.3
40°	2027.3	1304.5	720.1	597.8	570.5	584.5	579.1	549.2	506.7	485.4	478.7
42.5°	2161.6	1320.5	669.6	563.2	553.9	571.8	565.8	512.0	483.4	471.4	468.1
45°	2359.1	1379.0	619.0	535.9	541.2	553.9	544.6	490.0	478.7	470.8	466.8
47.5°	2710.8	1468.8	575.1	515.3	531.3	537.9	502.0	484.1	475.4	464.8	460.1
50°	3076.5	1508.0	539.9	502.7	520.0	523.3	478.7	476.1	470.1	458.8	454.1
52.5°	3323.9	1502.7	518.6	498.0	510.6	498.0	468.1	467.4	463.4	450.1	444.8
55°	3603.1	1512.0	509.3	499.3	506.7	455.5	454.8	456.8	454.8	440.2	437.5
57.5°	3980.1	1540.6	504.7	504.0	504.0	434.8	442.2	444.8	440.8	434.2	432.2
60°	4342.5	1542.6	496.0	509.3	502.0	422.2	427.5	430.2	425.5	424.2	423.5
62.5°	4478.8	1446.8	476.7	505.3	494.0	408.3	412.2	413.6	408.9	412.2	411.6
65°	*4276.0*	*1243.4*	*444.8*	*486.0*	*469.4*	*395.6*	*393.0*	*396.3*	*388.3*	*396.9*	*397.6*
67.5°	3796.6	988.1	396.3	449.5	434.8	381.7	376.3	376.3	363.0	376.3	375.7
70°	3061.2	698.2	325.1	391.0	396.9	365.0	362.4	347.1	325.8	345.8	343.8
72.5°	2320.5	501.3	256.0	309.2	341.8	341.8	342.4	316.5	291.9	301.2	293.2
75°	1470.1	353.1	204.8	236.7	268.0	299.9	315.2	267.3	245.4	241.4	237.4
77.5°	662.2	232.1	159.6	181.5	190.2	236.7	287.9	230.1	200.1	191.5	188.8
80°	277.3	144.3	113.7	128.3	117.0	198.8	254.0	178.9	146.9	135.0	126.3
82.5°	121.7	85.8	72.5	69.2	73.1	147.6	189.5	119.0	91.8	124.3	125.7
85°	51.2	45.2	37.2	33.9	29.9	56.5	89.1	46.5	57.2	32.6	26.6
87.5°	12.0	13.3	10.0	6.6	4.0	0.7	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

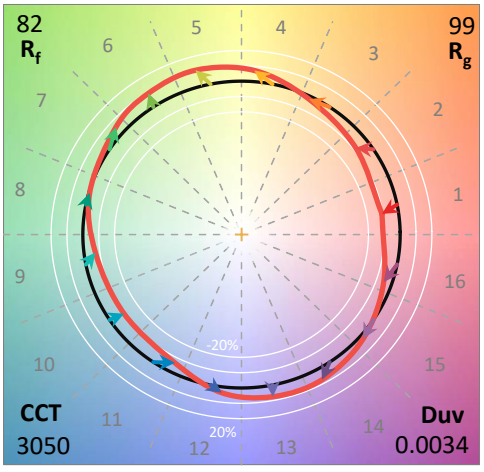
Test Information

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

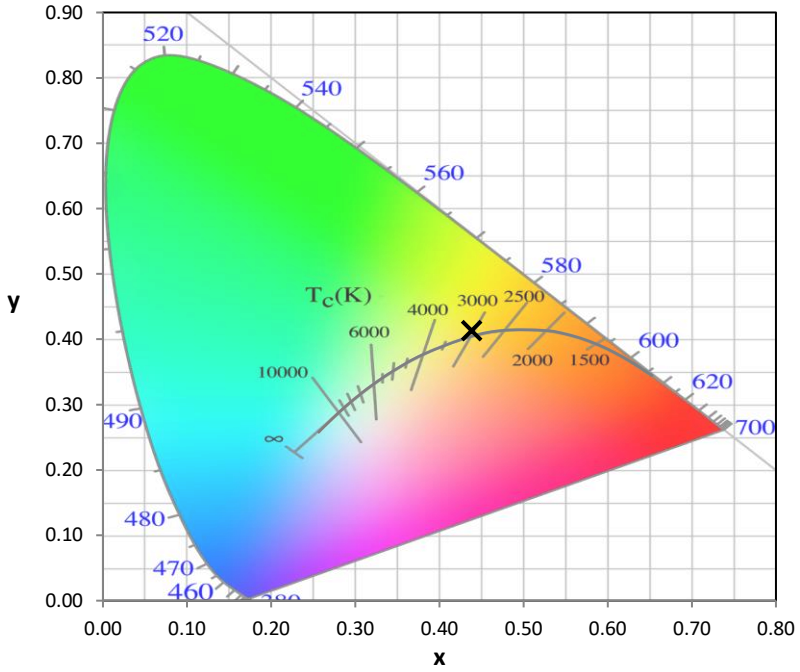
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

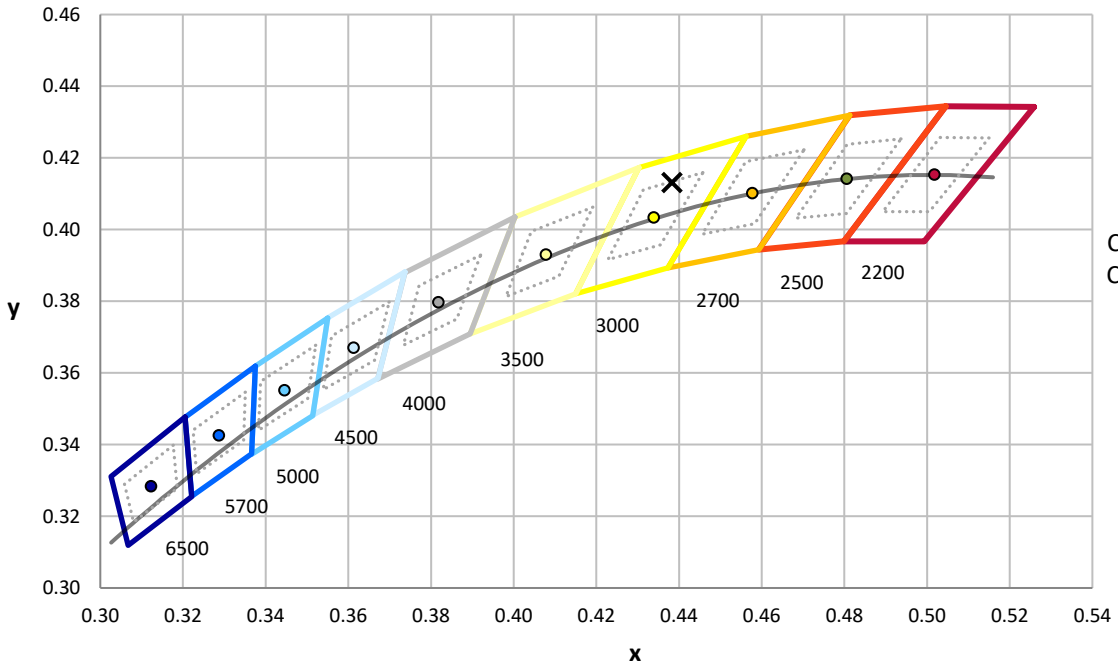
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

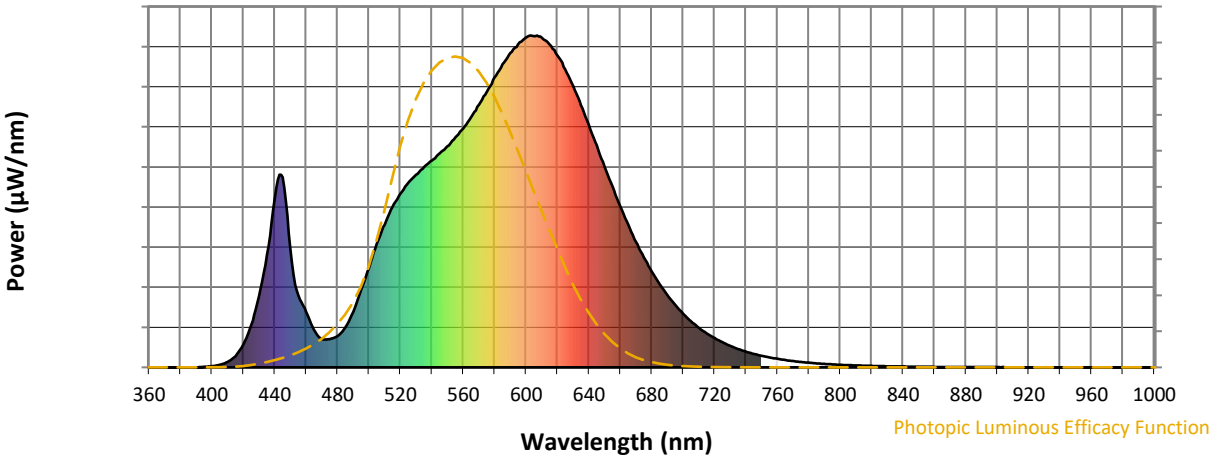


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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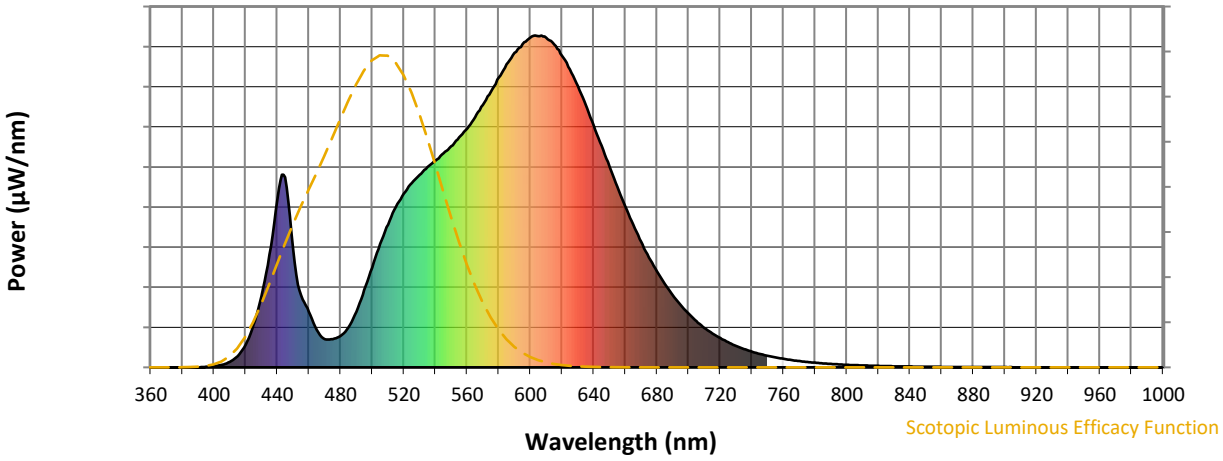
Scotopic Flux vs. Wavelength



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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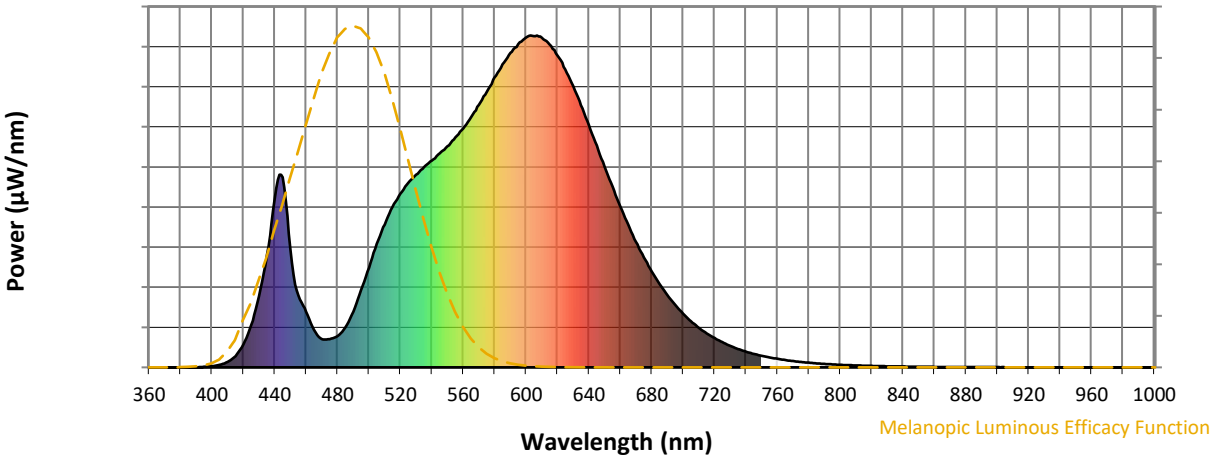
Melanopic Flux vs. Wavelength



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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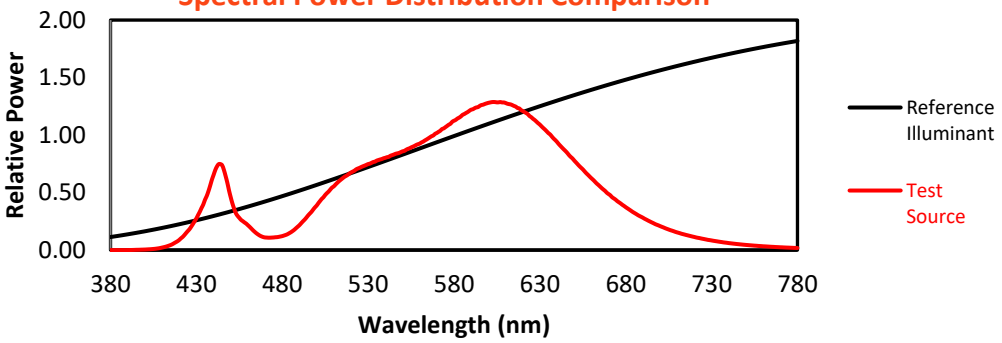
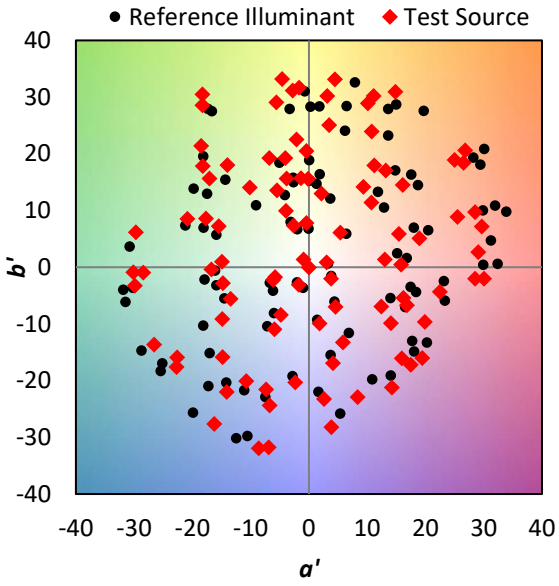
Summary

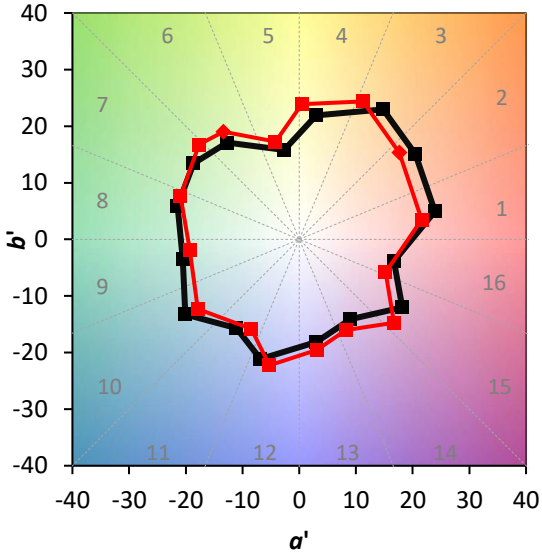
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

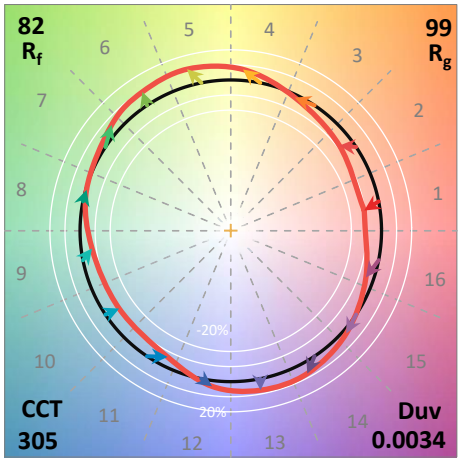
Spectral Power Distribution Comparison

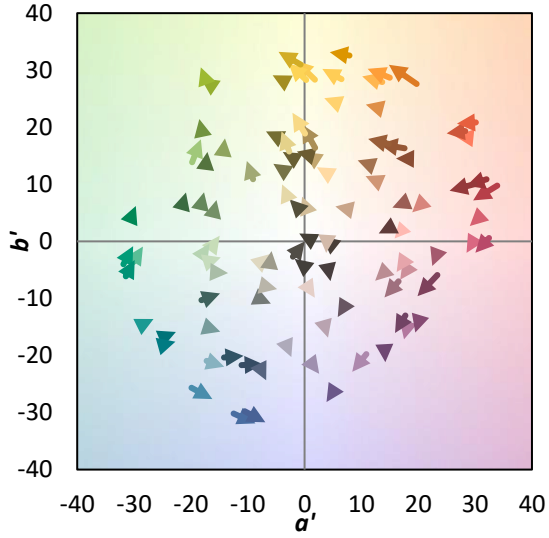


Color Vector Graphics









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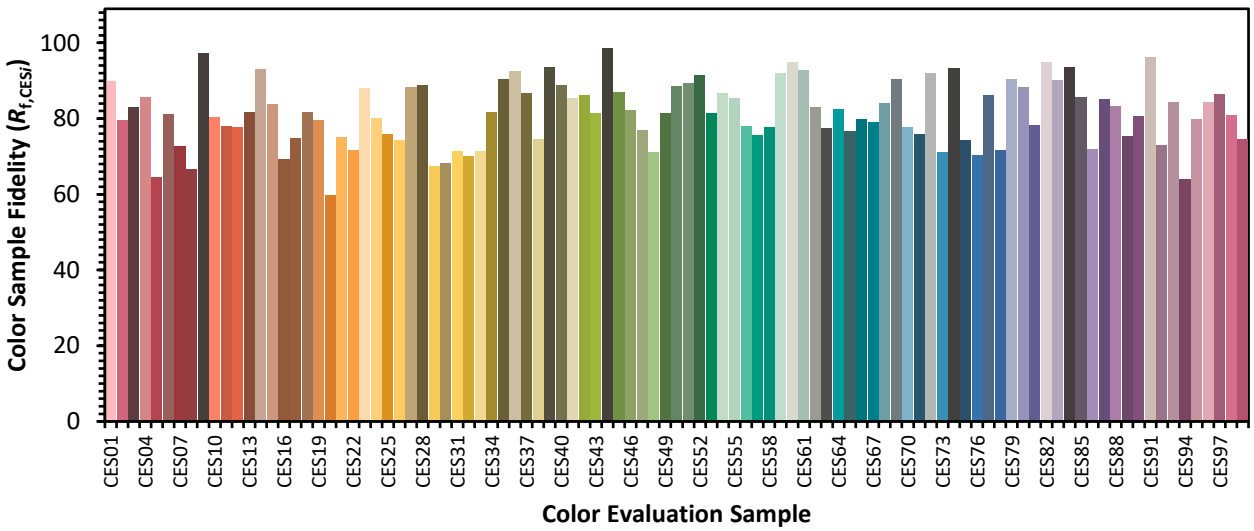
Individual Sample Fidelity Index ($R_{f,i}$)

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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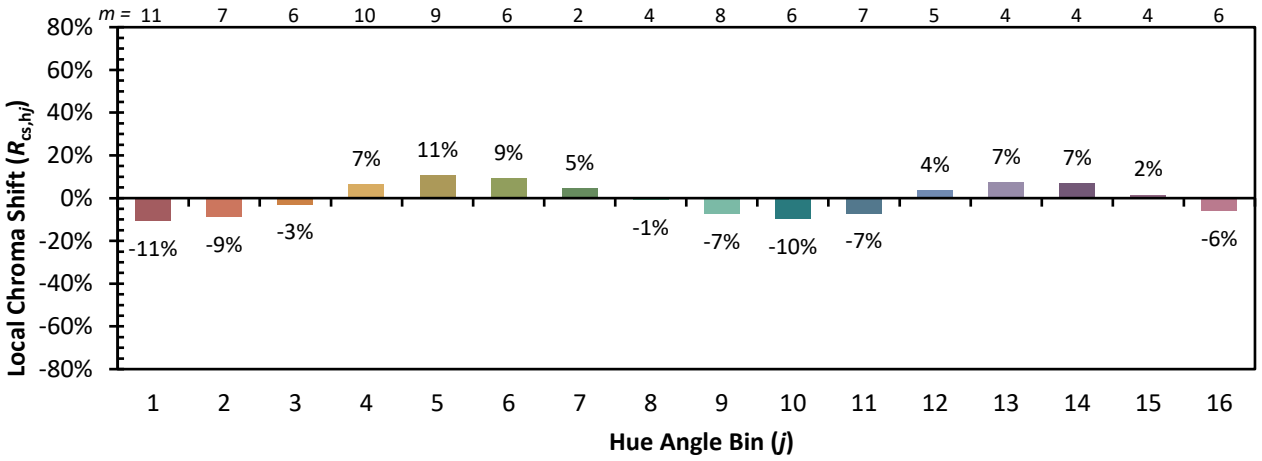
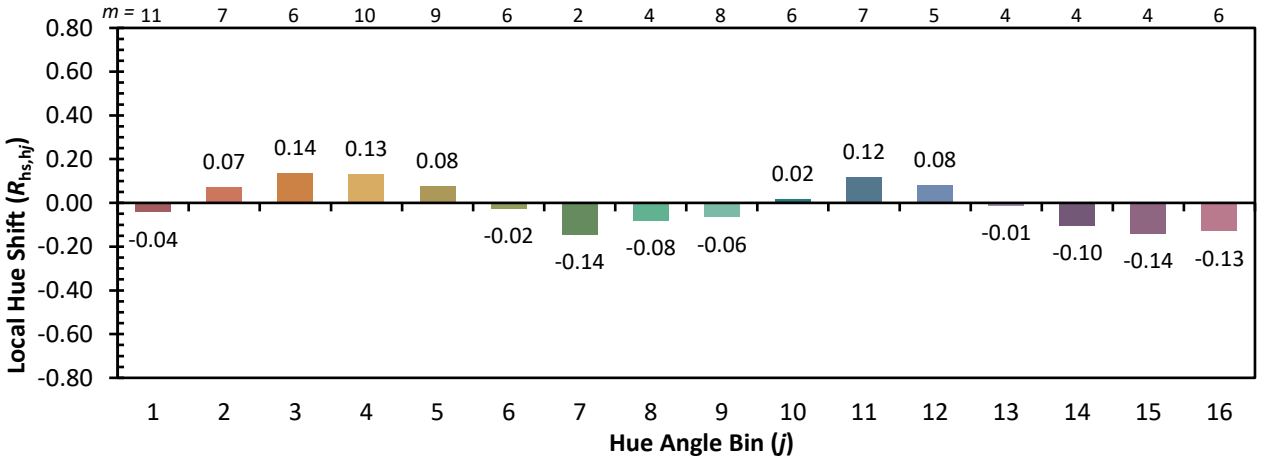
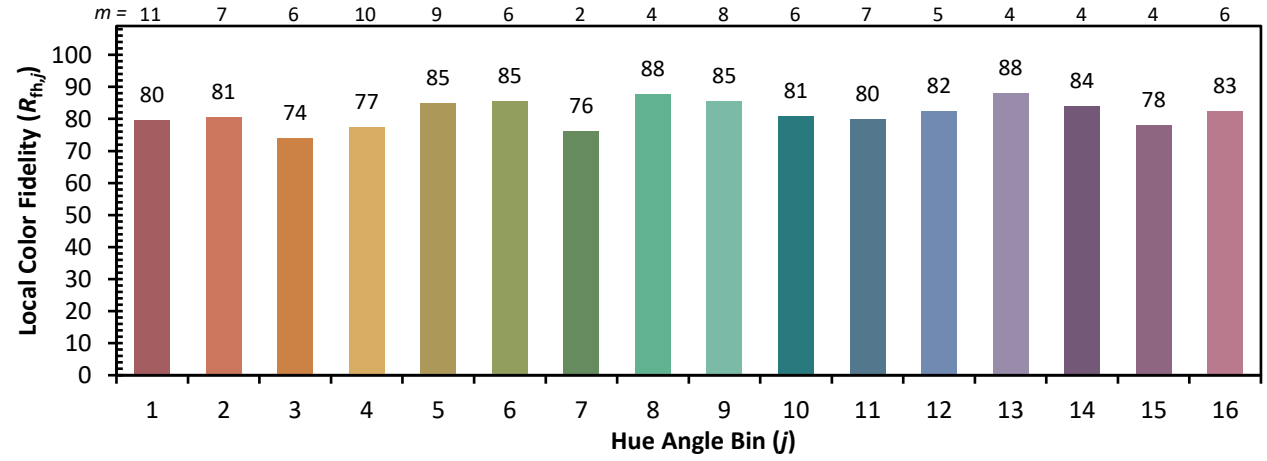
Color Rendition by Hue-Angle Bin







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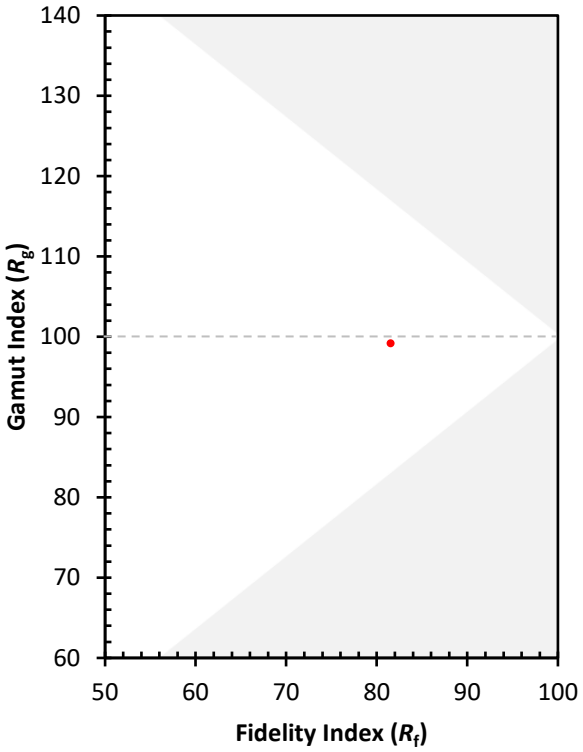
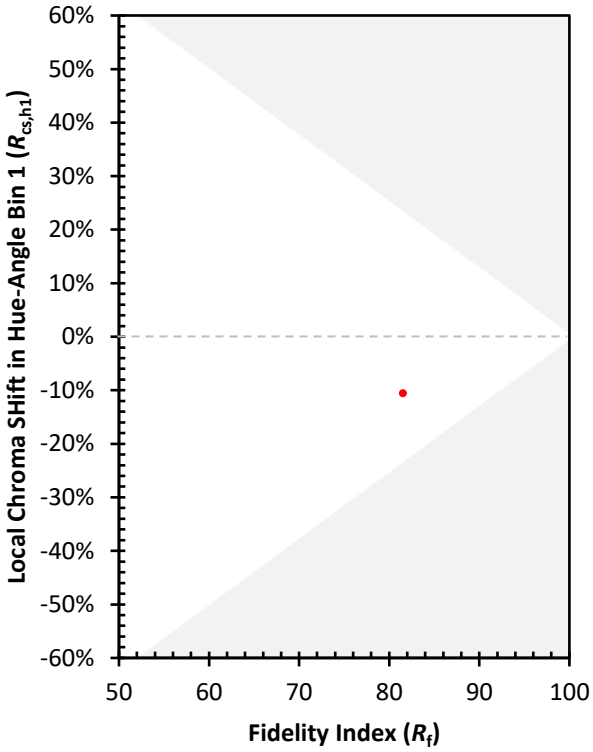
Measure Comparisons





(END OF REPORT)