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: P639453

Luminaire Tested: GWS-SA5B-830-U-AFL-W-GRSWH

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:	P639453
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-47)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5B-830-U-AFL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	12796.1 lumens
Efficiency:	N/A
Efficacy:	110.6 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

Input Watts (W):	115.7
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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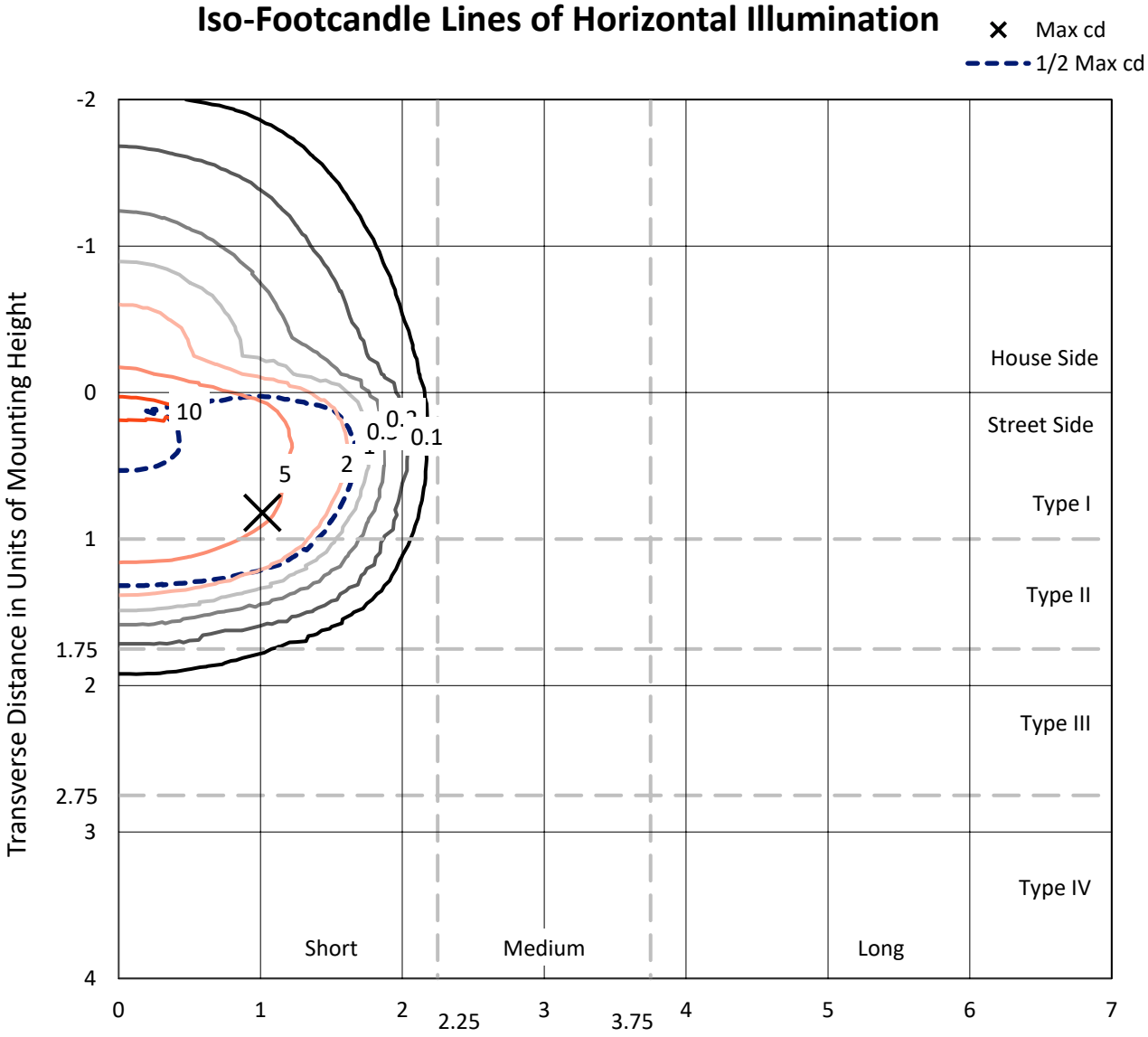
Scaled Data Report

REPORT NUMBER: P639453
CATALOG NUMBER: GWS-SA5B-830-U-AFL-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 11.6 fc
Type II - Short - N/A

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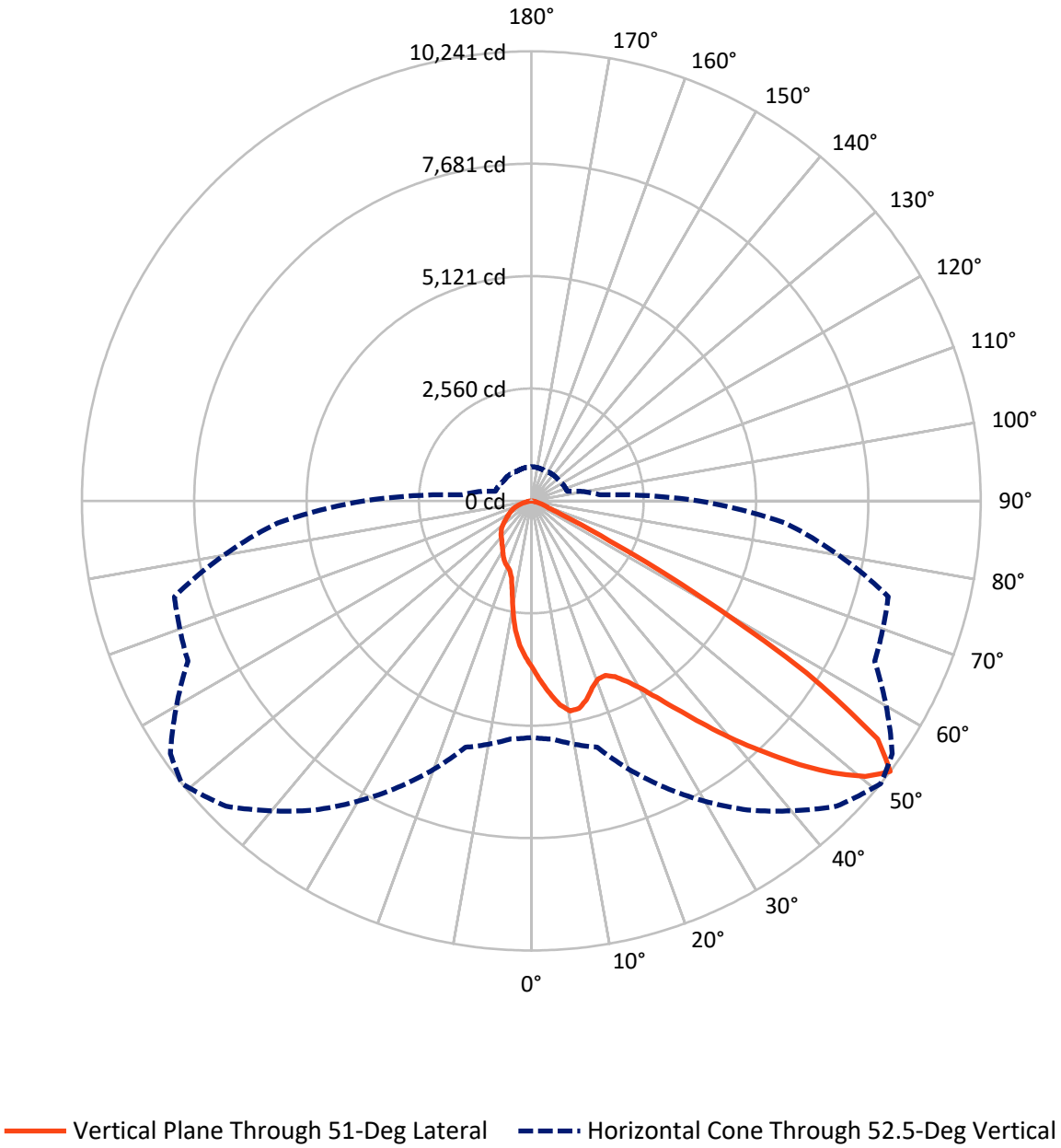
Luminous Intensity Polar Plot



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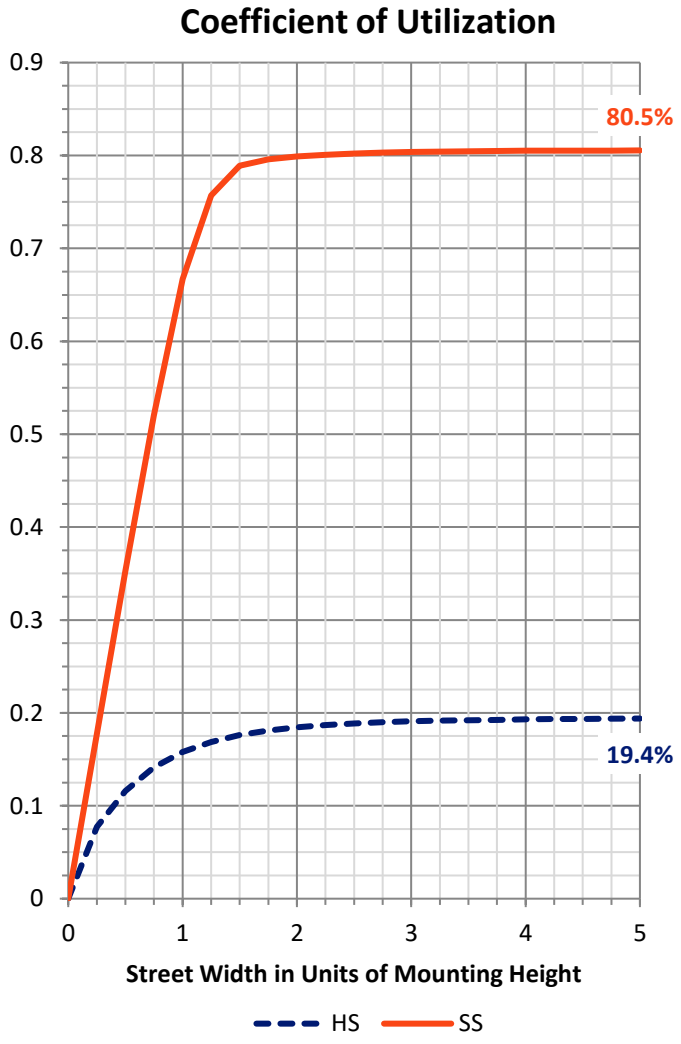
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2493.2	0.0	2493.2
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	10302.9	0.0	10302.9
	% Fixture	80.5	0.0	80.5
Total	Lumens	12796.1	0.0	12796.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.5	2.8
10°-20°	923.8	7.2
20°-30°	1502.0	11.7
30°-40°	2380.4	18.6
40°-50°	3590.1	28.1
50°-60°	3105.7	24.3
60°-70°	704.1	5.5
70°-80°	207.6	1.6
80°-90°	26.7	0.2
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°	12796.1	100.0
0°-180°	12796.1	100.0



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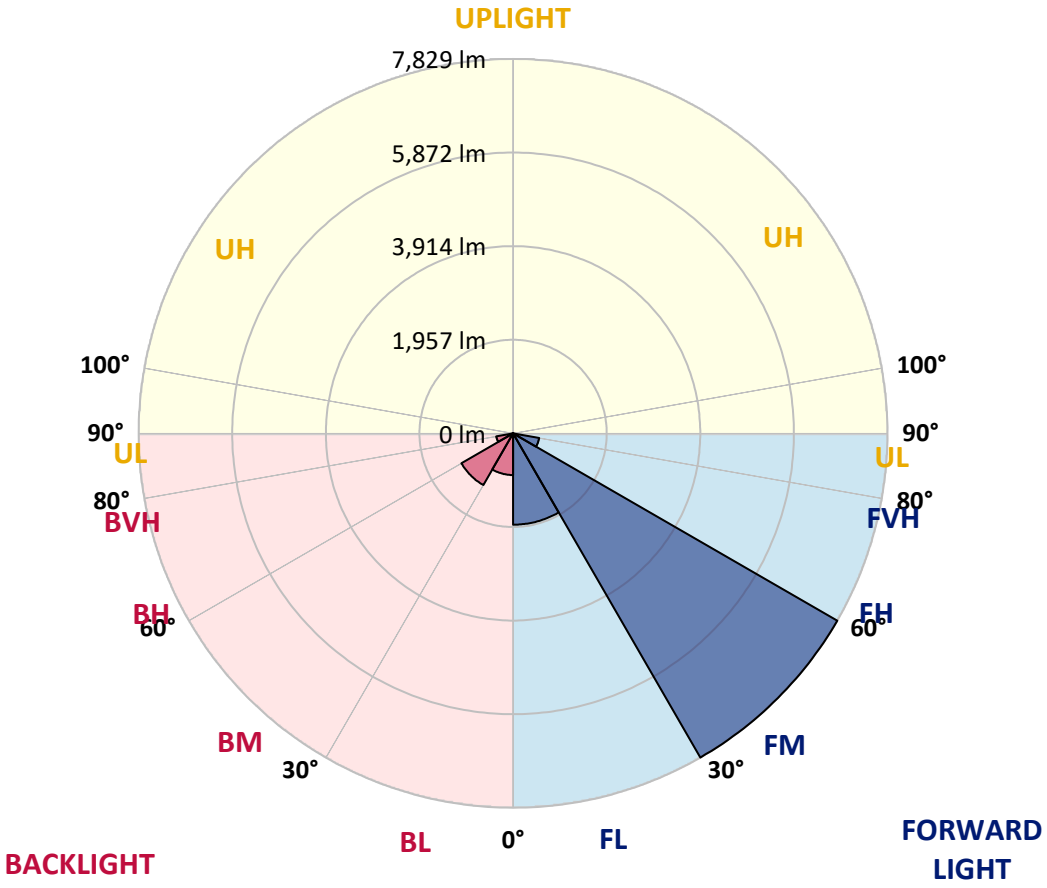
REPORT NUMBER: P639453
CATALOG NUMBER: GWS-SA5B-830-U-AFL-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1909.8	14.9			
FM	(30°-60°)	7828.8	61.2			
FH	(60°-80°)	554.1	4.3			G0/660
FVH	(80°-90°)	10.1	0.1			G1/100
BL	(0°-30°)	871.5	6.8	B2/1000		
BM	(30°-60°)	1247.4	9.7	B2/2500		
BH	(60°-80°)	357.6	2.8	B1/500		G1/500
BVH	(80°-90°)	16.7	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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REPORT NUMBER: P639453
CATALOG NUMBER: GWS-SA5B-830-U-AFL-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	51°	55°	65°	75°	85°
0°	3810.0	3810.0	3810.0	3810.0	3810.0	3810.0	*3810.0*	3810.0	3810.0	3810.0	3810.0
2.5°	4245.8	4270.1	4232.7	4218.5	4195.3	4154.8	*4108.3*	4095.2	3995.1	3929.4	3855.5
5°	4672.6	4685.7	4655.4	4625.0	4567.4	4495.6	*4405.6*	4386.4	4204.4	4053.7	3897.0
7.5°	4767.6	4762.5	4788.8	4806.0	4798.9	4770.6	*4690.8*	4653.3	4435.9	4197.3	3965.8
10°	4391.5	4363.1	4460.2	4575.5	4714.0	4873.8	*4864.7*	4861.6	4672.6	4390.4	4053.7
12.5°	3893.0	3878.8	3957.7	4102.3	4364.2	4718.1	*4850.5*	4953.7	4885.9	4574.5	4151.8
15°	3607.8	3602.8	3656.3	3760.5	3968.8	4415.7	*4698.8*	4903.1	5068.9	4771.6	4256.0
17.5°	3556.2	3559.3	3577.5	3637.1	3786.8	4154.8	*4482.5*	4767.6	5211.5	4988.0	4386.4
20°	3706.9	3727.1	3695.8	3704.9	3785.8	4060.8	*4334.8*	4631.1	5302.5	5205.4	4526.9
22.5°	4041.6	4034.5	3965.8	3925.3	3926.3	4118.4	*4318.6*	4567.4	5362.2	5416.8	4654.4
25°	4420.8	4412.7	4330.8	4240.8	4184.2	4275.2	*4434.9*	4635.1	5415.8	5609.9	4756.5
27.5°	4868.7	4843.4	4752.4	4637.2	4511.8	4551.2	*4659.4*	4818.2	5498.7	5800.0	4824.2
30°	5302.5	5331.8	5201.4	5064.9	4932.4	4908.2	*4970.8*	5114.4	5667.5	6022.4	4905.1
32.5°	5877.9	5867.7	5723.1	5545.2	5356.1	5337.9	*5387.4*	5518.9	5970.9	6329.8	5028.5
35°	6574.5	6576.6	6371.3	6130.6	5861.7	5813.1	*5896.1*	6023.5	6422.9	6746.4	5223.6
37.5°	7298.5	7295.5	7116.5	6843.5	6476.5	6407.7	*6502.7*	6597.8	6988.1	7313.7	5527.0
40°	7806.1	7826.4	7742.4	7598.8	7251.0	7083.2	*7167.1*	7232.8	7602.9	7981.1	5926.4
42.5°	8094.3	8124.6	8142.8	8228.8	8045.8	7866.8	*7836.5*	7870.8	8151.9	8600.9	6301.5
45°	8156.0	8196.4	8328.9	8647.4	8718.2	8667.6	*8568.5*	8485.6	8561.5	9040.7	6547.2
47.5°	7884.0	7954.8	8237.9	8795.0	9208.6	9367.4	*9257.1*	9130.7	8798.1	9154.0	6522.0
50°	6806.1	6889.0	7527.0	8493.7	9278.4	9856.8	*9866.9*	9679.8	8769.8	8827.4	6204.5
52.5°	*5388.5*	*5445.1*	*5810.1*	*7200.4*	*8593.8*	*9836.5*	*10241.0*	*10040.8*	*8633.3*	*8418.9*	*5807.1*
55°	3220.5	3311.5	3652.3	4750.4	6694.9	8718.2	*9579.7*	9676.8	8566.5	8076.1	5536.1
57.5°	1087.0	1131.5	1457.1	2098.1	3945.5	6383.4	*7401.7*	7796.0	7776.8	7552.3	5007.2
60°	517.7	527.8	593.5	795.8	1579.4	3335.8	*4381.3*	4836.4	5250.9	5292.4	3115.4
62.5°	394.4	400.4	433.8	477.3	635.0	1405.5	*2008.2*	2356.0	2516.8	2159.8	1134.5
65°	329.6	334.7	360.0	387.3	431.8	608.7	*770.5*	888.8	800.8	623.9	541.0
67.5°	275.0	279.1	298.3	327.6	357.9	407.5	*427.7*	439.9	461.1	517.7	497.5
70°	215.4	219.4	239.6	264.9	294.2	306.4	*325.6*	337.7	380.2	453.0	451.0
72.5°	165.8	170.9	182.0	198.2	222.5	234.6	*255.8*	270.0	294.2	352.9	377.2
75°	121.3	124.4	134.5	139.5	142.6	139.5	*160.8*	177.0	209.3	231.6	237.6
77.5°	49.5	55.6	53.6	53.6	63.7	76.8	*88.0*	98.1	120.3	133.5	134.5
80°	20.2	22.2	26.3	29.3	35.4	45.5	*52.6*	56.6	66.7	74.8	80.9
82.5°	12.1	13.1	15.2	16.2	20.2	26.3	*30.3*	33.4	41.5	49.5	52.6
85°	6.1	6.1	7.1	8.1	10.1	12.1	*14.2*	16.2	21.2	26.3	29.3
87.5°	1.0	1.0	1.0	2.0	3.0	4.0	*5.1*	6.1	7.1	8.1	10.1
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: P639453
CATALOG NUMBER: GWS-SA5B-830-U-AFL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3810.0	3810.0	3810.0	3810.0	3810.0	3810.0	3810.0	3810.0	3810.0	3810.0	3810.0
2.5°	3812.1	3757.5	3693.8	3643.2	3584.5	3541.1	3479.4	3441.0	3404.6	3374.2	3352.0
5°	3816.1	3724.1	3591.6	3474.3	3353.0	3237.7	3119.4	3023.4	2937.4	2865.6	2859.6
7.5°	3839.4	3706.9	3499.6	3294.3	3057.7	2829.2	2600.7	2414.6	2273.1	2199.3	2184.1
10°	3878.8	3704.9	3405.6	3078.0	2674.5	2306.4	2035.5	1893.9	1812.0	1782.7	1772.6
12.5°	3920.3	3699.8	3285.2	2772.6	2212.4	1889.9	1741.2	1724.0	1739.2	1741.2	1740.2
15°	3970.8	3696.8	3133.6	2414.6	1874.7	1696.7	1706.8	1743.2	1778.6	1786.7	1786.7
17.5°	4032.5	3689.7	2927.3	2064.8	1663.4	1659.3	1712.9	1761.4	1794.8	1800.9	1800.9
20°	4097.2	3671.5	2673.5	1779.6	1577.4	1636.1	1693.7	1731.1	1754.4	1762.4	1763.5
22.5°	4141.7	3623.0	2381.3	1568.3	1523.8	1591.6	1633.0	1671.4	1671.4	1651.2	1645.2
25°	4150.8	3518.8	2064.8	1423.7	1460.1	1522.8	1565.3	1543.0	1501.6	1485.4	1484.4
27.5°	4117.4	3367.2	1752.3	1320.6	1383.3	1446.0	1438.9	1406.5	1388.3	1372.1	1378.2
30°	4077.0	3185.1	1481.3	1235.6	1294.3	1356.0	1331.7	1320.6	1307.4	1289.2	1293.3
32.5°	4049.7	2981.9	1273.0	1169.9	1234.6	1244.7	1261.9	1260.9	1248.8	1214.4	1212.4
35°	4057.8	2776.6	1133.5	1116.3	1185.1	1181.0	1213.4	1207.3	1123.4	1075.9	1072.8
37.5°	4122.5	2579.5	1051.6	1073.8	1106.2	1131.5	1159.8	1087.0	1057.7	1027.3	1029.4
40°	4245.8	2396.4	1007.1	1050.6	1058.7	1096.1	1030.4	1029.4	1016.2	988.9	987.9
42.5°	4385.4	2241.7	976.8	1039.5	1028.3	1035.4	965.7	973.7	972.7	955.5	950.5
45°	4470.3	2099.2	952.5	998.0	1001.0	930.3	909.0	918.1	923.2	914.1	913.1
47.5°	4382.4	1935.4	927.2	934.3	960.6	882.7	856.4	857.5	866.6	867.6	863.5
50°	4135.6	1752.3	896.9	879.7	862.5	833.2	808.9	803.9	813.0	822.1	825.1
52.5°	*3817.1*	*1577.4*	*846.3*	*820.0*	*779.6*	*779.6*	*768.5*	*752.3*	*764.4*	*776.6*	*780.6*
55°	3583.5	1448.0	774.5	745.2	700.7	715.9	713.9	699.7	715.9	725.0	728.0
57.5°	3105.3	1163.8	681.5	672.4	635.0	653.2	657.3	639.1	631.0	633.0	636.0
60°	1843.3	751.3	614.8	613.8	580.4	601.6	613.8	595.6	571.3	574.3	578.4
62.5°	827.1	574.3	530.9	526.8	525.8	553.1	566.2	549.1	514.7	517.7	521.8
65°	520.7	496.5	461.1	461.1	477.3	500.5	510.6	496.5	457.0	452.0	456.0
67.5°	483.3	462.1	425.7	418.6	426.7	445.9	446.9	419.6	396.4	392.3	392.3
70°	433.8	417.6	382.2	368.1	365.0	364.0	361.0	353.9	338.7	334.7	336.7
72.5°	359.0	347.8	325.6	310.4	302.3	301.3	289.2	283.1	270.0	268.0	266.9
75°	237.6	240.7	240.7	238.6	231.6	228.5	215.4	209.3	194.1	188.1	187.1
77.5°	140.6	143.6	147.6	148.6	147.6	147.6	135.5	128.4	113.2	105.2	103.1
80°	85.9	88.0	90.0	93.0	89.0	85.9	74.8	67.7	60.7	55.6	54.6
82.5°	55.6	57.6	58.6	60.7	58.6	54.6	45.5	41.5	36.4	32.4	31.3
85°	31.3	32.4	34.4	34.4	31.3	28.3	23.3	20.2	17.2	15.2	15.2
87.5°	11.1	11.1	11.1	12.1	10.1	9.1	6.1	4.0	3.0	3.0	3.0
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

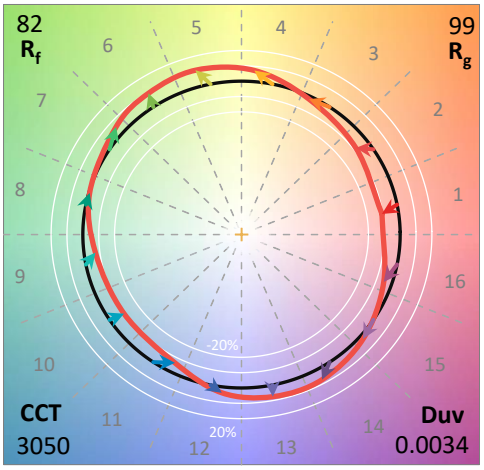
Test Information

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

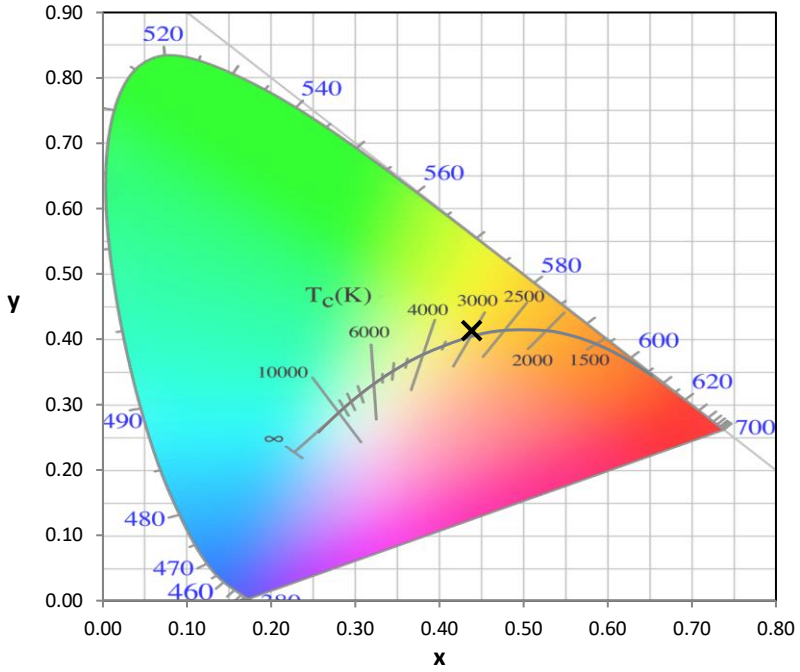
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

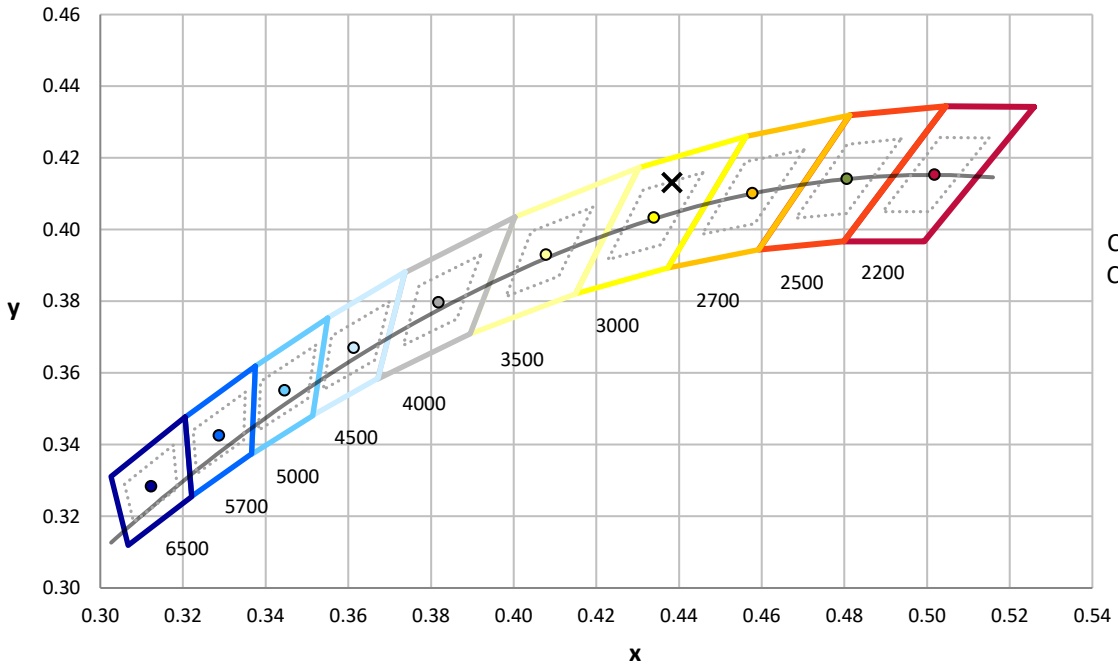
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

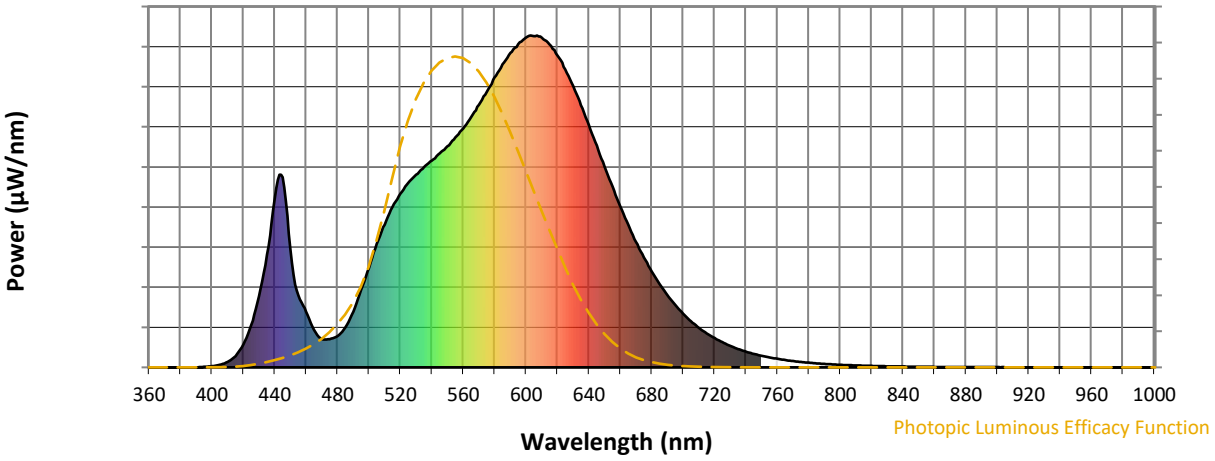


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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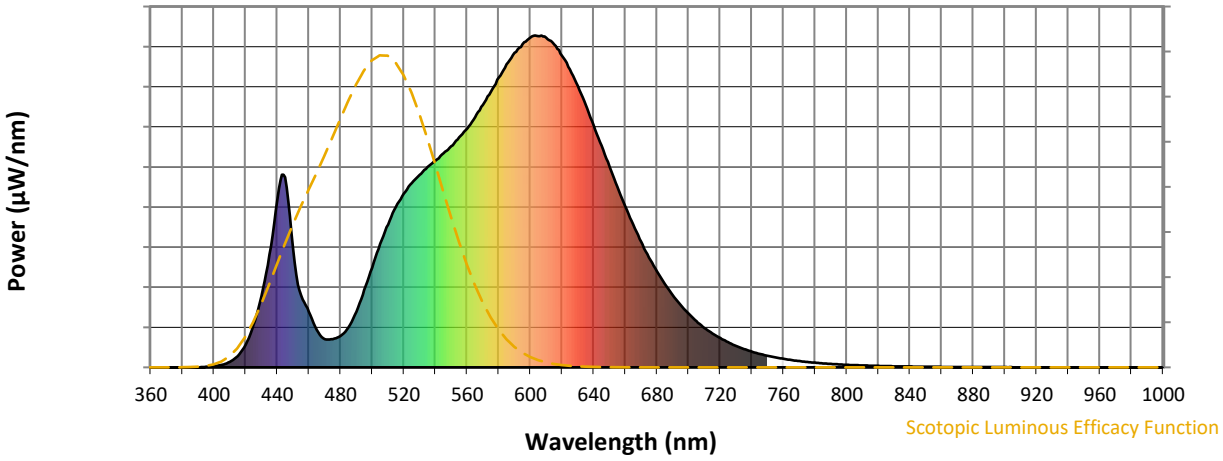
Scotopic Flux vs. Wavelength



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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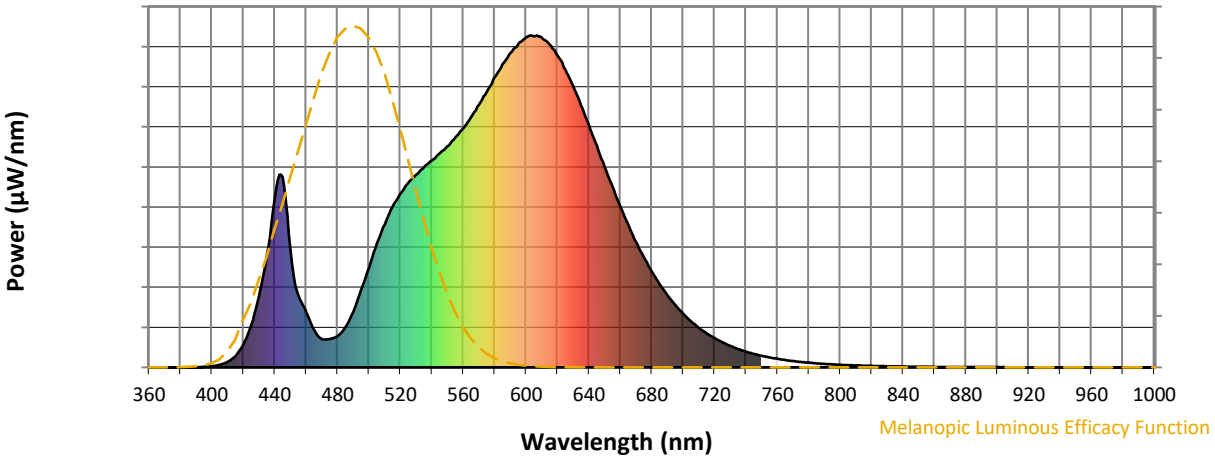
Melanopic Flux vs. Wavelength



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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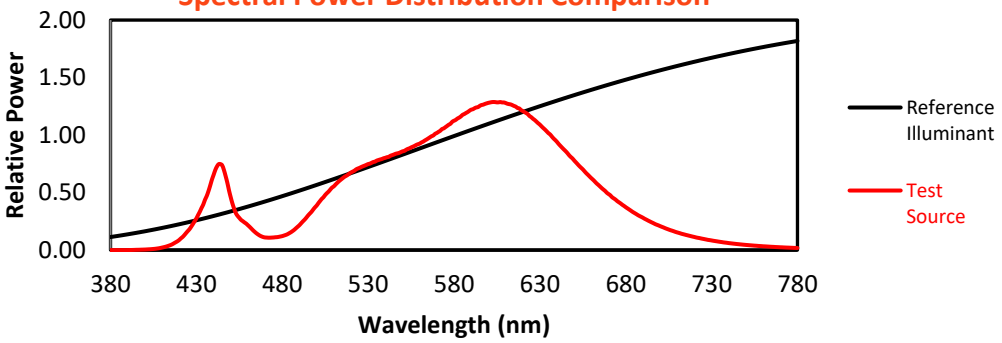
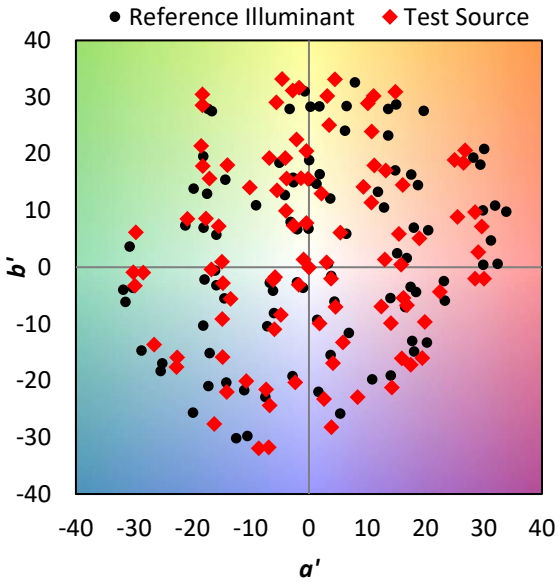
Summary

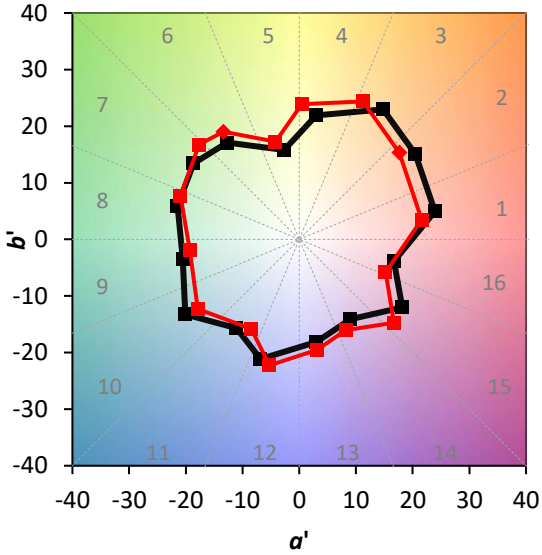
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

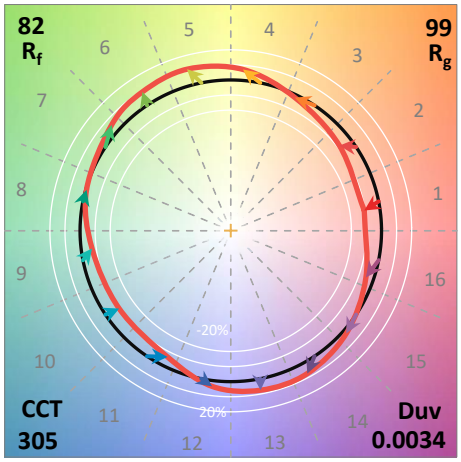
Spectral Power Distribution Comparison

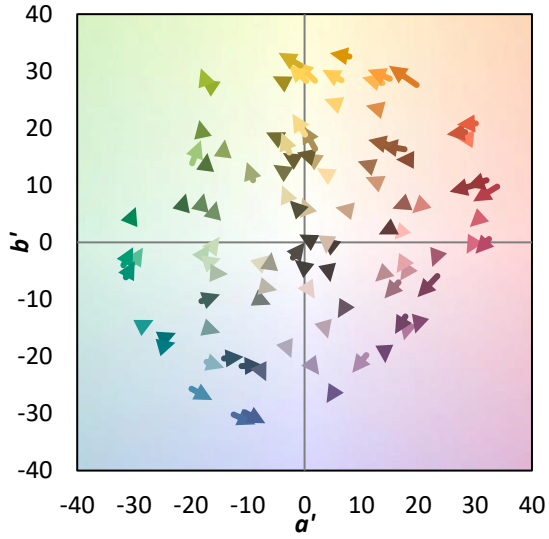


Color Vector Graphics









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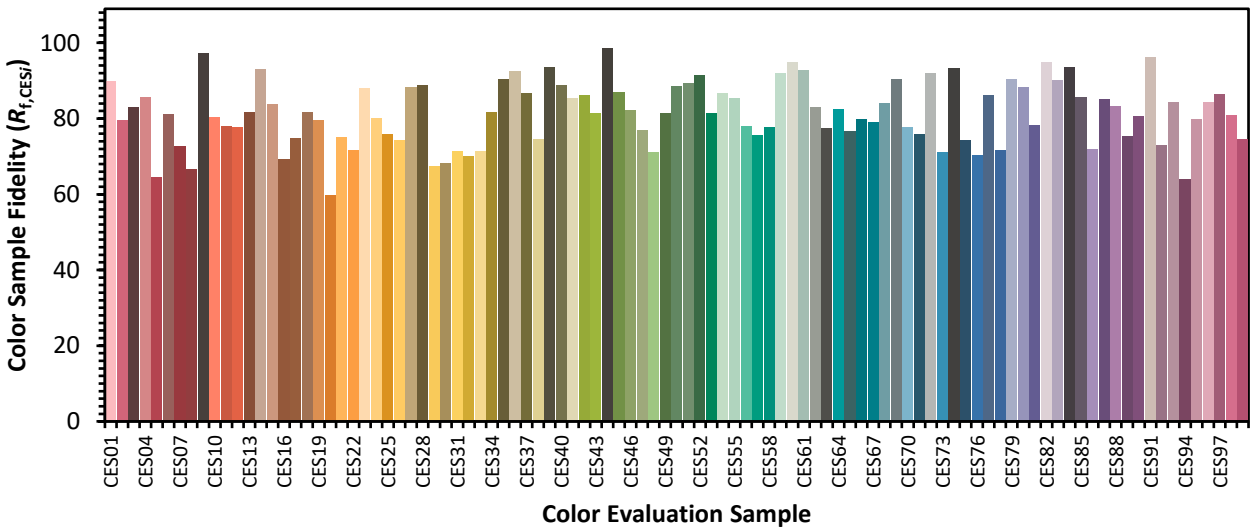
Individual Sample Fidelity Index ($R_{f,i}$)

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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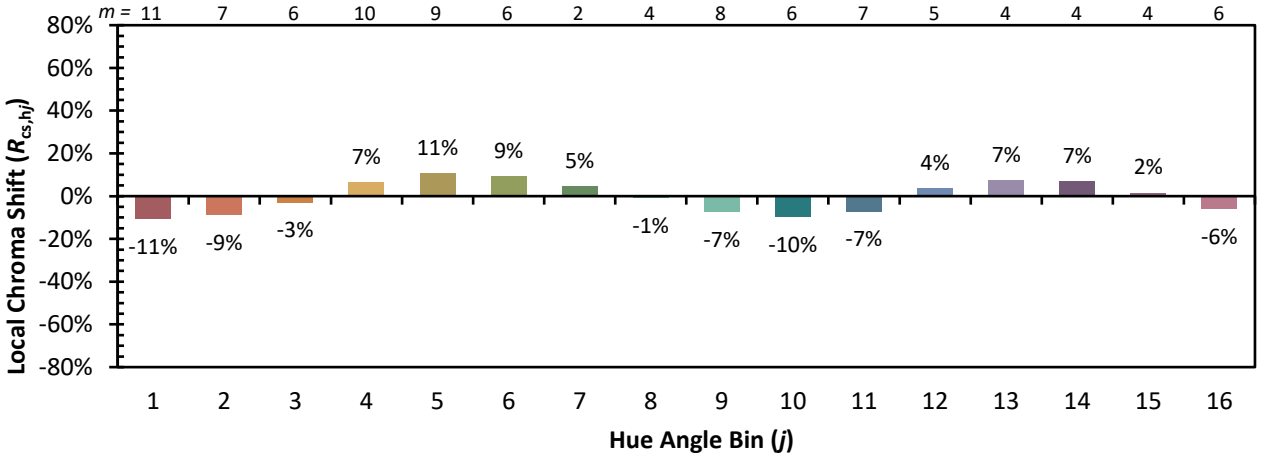
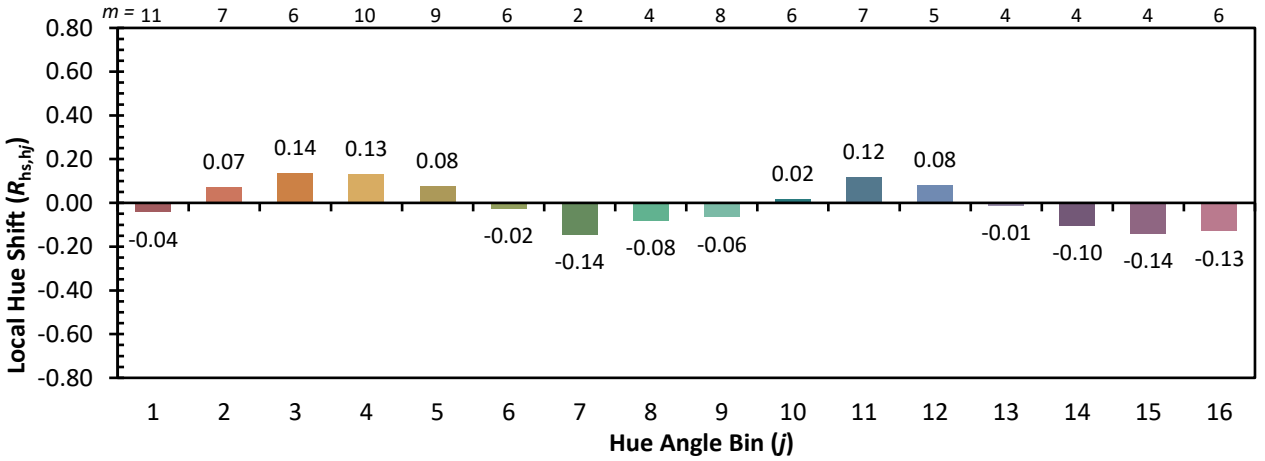
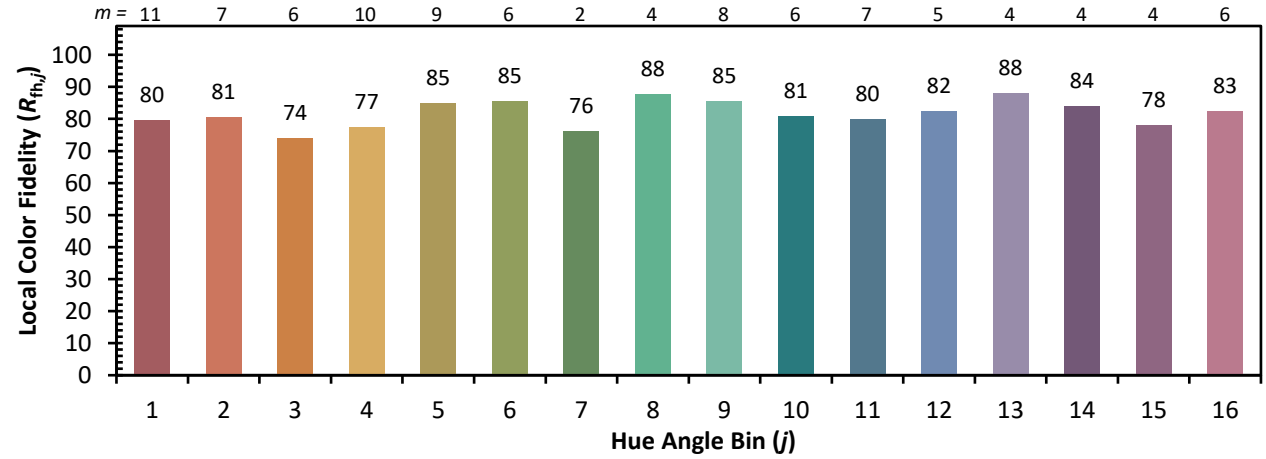
Color Rendition by Hue-Angle Bin







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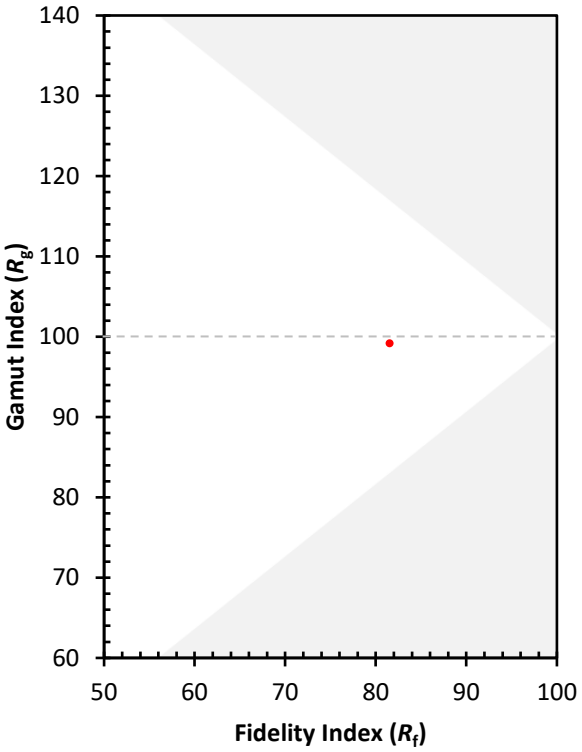
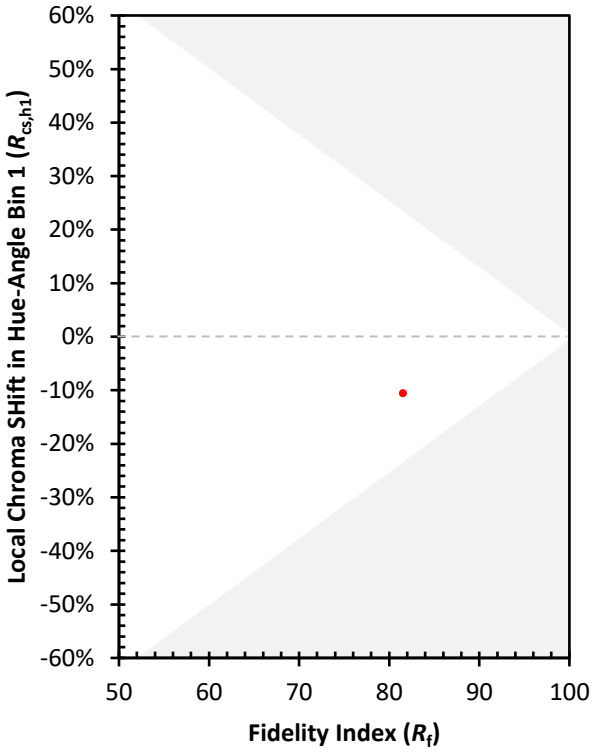
Measure Comparisons





(END OF REPORT)