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: P638473

Luminaire Tested: GWS-SA4E-830-U-SL3-W-GRSBK

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:	P638473
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-32)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4E-830-U-SL3-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	14219 lumens
Efficiency:	N/A
Efficacy:	70.2 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G1

Input Watts (W):	202.6
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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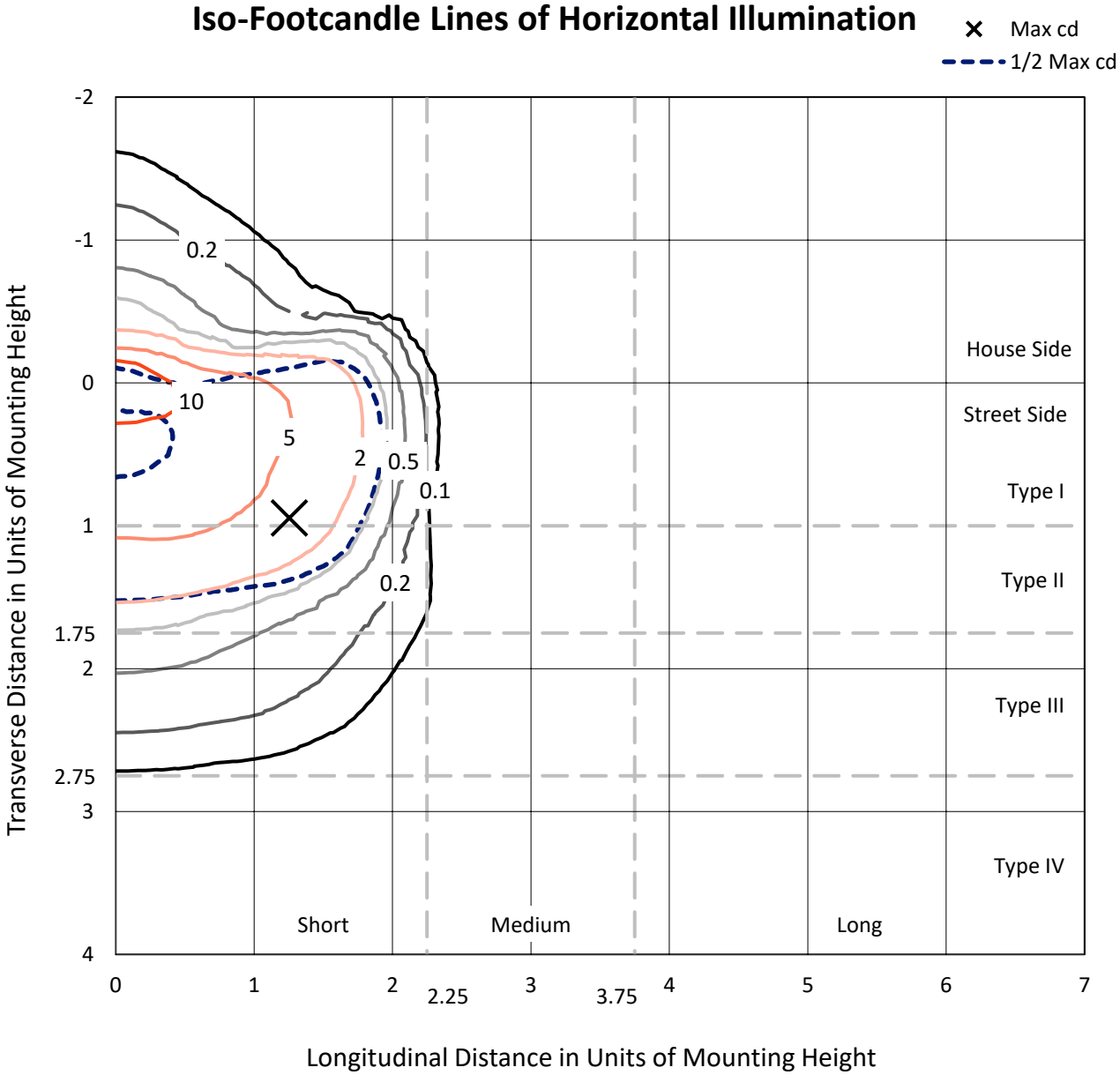
REPORT NUMBER: P638473
CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 15.6 fc
Type II - Short - N/A

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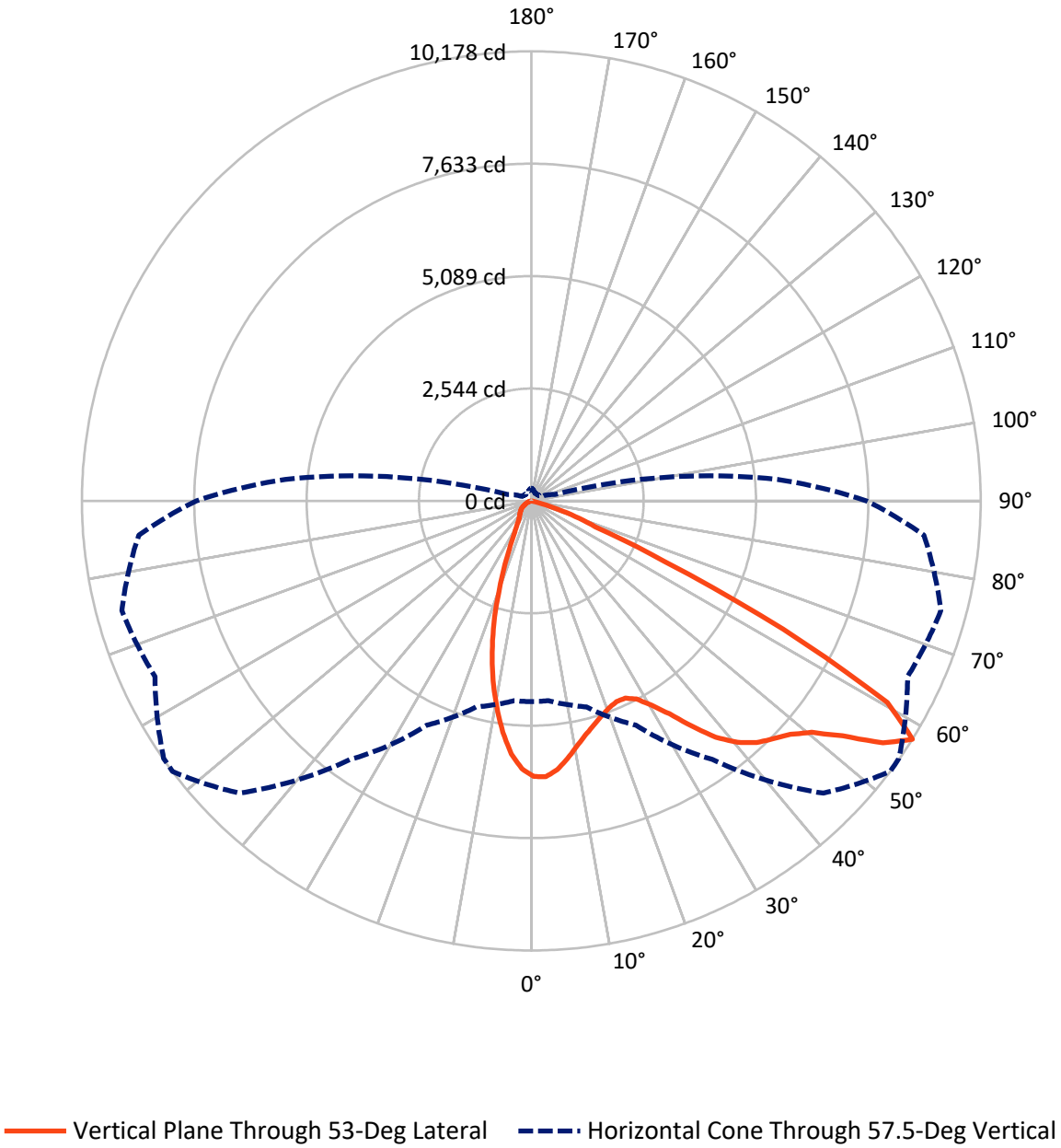
Luminous Intensity Polar Plot



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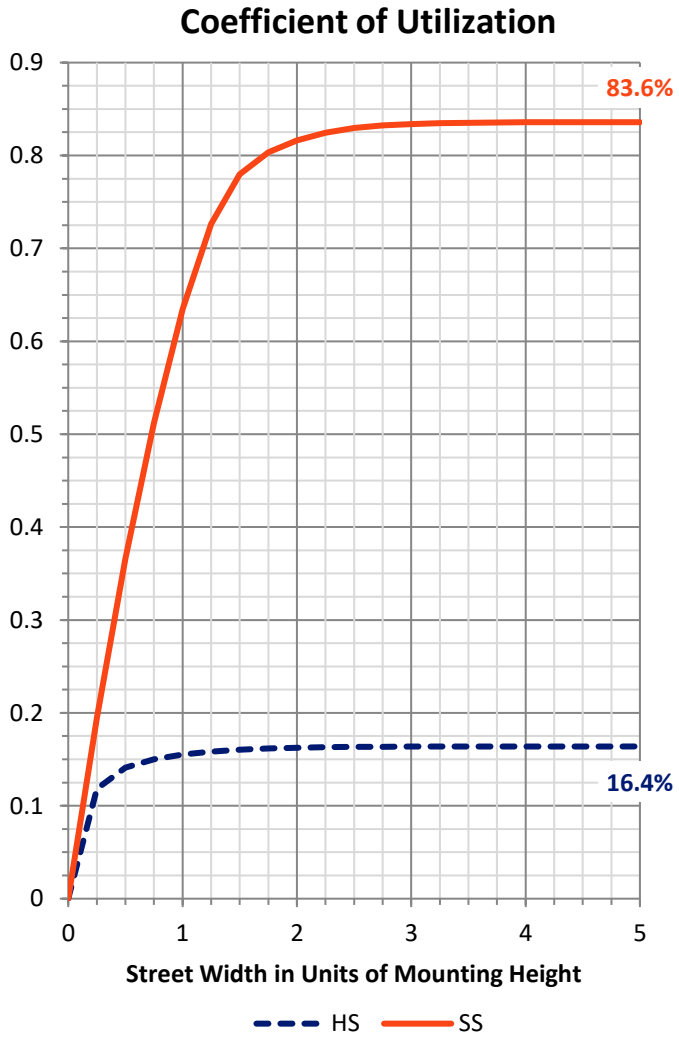
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2348.8	0.0	2348.8
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	11870.2	0.0	11870.2
	% Fixture	83.5	0.0	83.5
Total	Lumens	14219.0	0.0	14219.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	533.6	3.8
10°-20°	1171.6	8.2
20°-30°	1526.2	10.7
30°-40°	2213.8	15.6
40°-50°	3194.4	22.5
50°-60°	3863.3	27.2
60°-70°	1574.5	11.1
70°-80°	141.5	1.0
80°-90°	0.0	0.0
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°	14219.0	100.0
0°-180°	14219.0	100.0



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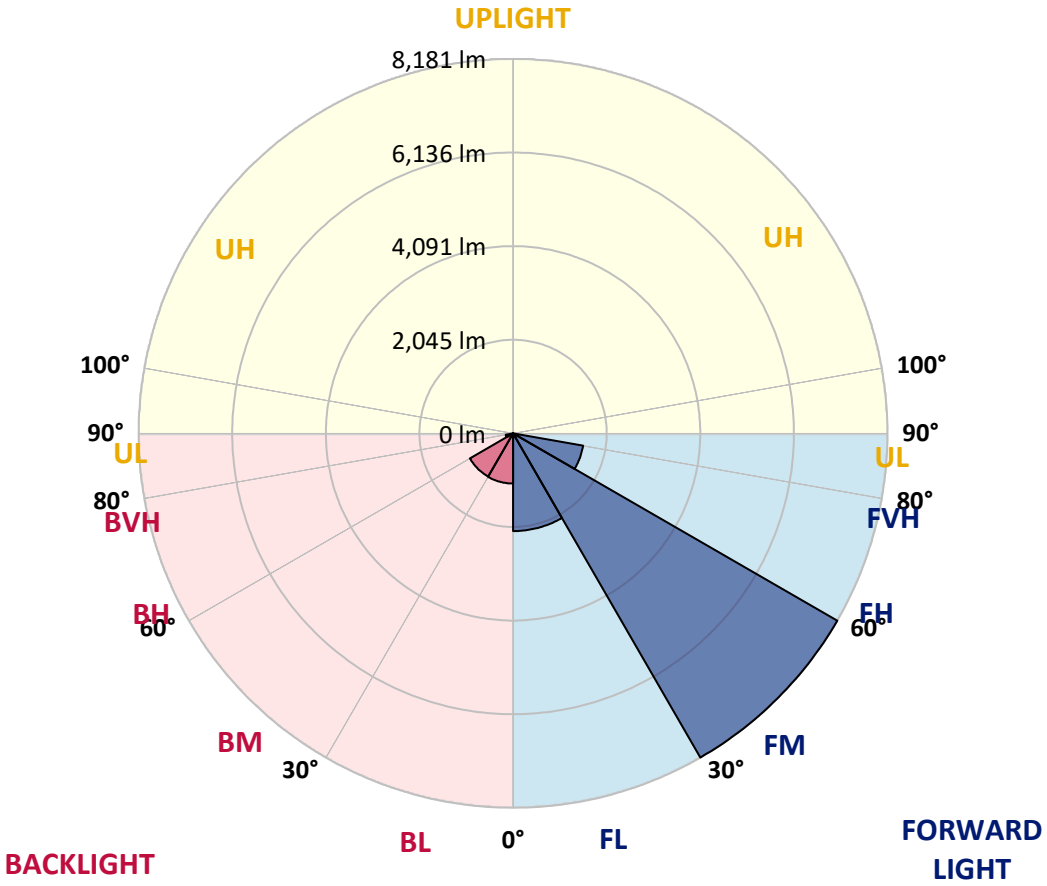
REPORT NUMBER: P638473
CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2135.2	15.0			
FM	(30°-60°)	8181.3	57.5			
FH	(60°-80°)	1553.7	10.9			G1/1800
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	1096.2	7.7	B3/2500		
BM	(30°-60°)	1090.2	7.7	B2/2500		
BH	(60°-80°)	162.4	1.1	B1/500		G1/500
BVH	(80°-90°)	0.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1
Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	6237.3	6237.3	6237.3	6237.3	6237.3	6237.3	*6237.3*	6237.3	6237.3	6237.3	6237.3
2.5°	6150.1	6164.1	6188.5	6219.8	6240.7	6251.2	*6251.2*	6280.8	6261.7	6246.0	6228.6
5°	5887.0	5900.9	5934.0	5984.6	6035.1	6071.7	*6113.5*	6144.9	6157.1	6157.1	6127.5
7.5°	5515.8	5534.9	5555.9	5625.6	5735.4	5817.3	*5888.7*	5934.0	6000.3	6021.2	5979.3
10°	5116.7	5135.9	5182.9	5278.8	5404.2	5526.2	*5648.2*	5705.7	5819.0	5878.3	5831.2
12.5°	4778.6	4787.3	4850.0	4965.1	5125.4	5292.7	*5440.8*	5500.1	5660.4	5749.3	5693.5
15°	4499.8	4505.0	4567.7	4694.9	4879.7	5085.3	*5271.8*	5332.8	5529.7	5663.9	5580.3
17.5°	4288.9	4290.6	4344.6	4482.3	4675.8	4904.1	*5125.4*	5200.3	5454.8	5616.8	5491.4
20°	4182.6	4177.3	4215.7	4335.9	4518.9	4747.2	*5008.6*	5101.0	5412.9	5609.9	5423.4
22.5°	4184.3	4172.1	4187.8	4273.2	4428.3	4642.7	*4935.4*	5040.0	5416.4	5639.5	5365.9
25°	4283.7	4266.2	4269.7	4315.0	4424.8	4620.0	*4945.9*	5057.4	5486.1	5738.8	5345.0
27.5°	4451.0	4431.8	4431.8	4454.4	4513.7	4691.5	*5076.6*	5203.8	5672.6	5932.3	5388.5
30°	4667.1	4647.9	4640.9	4663.6	4712.4	4876.2	*5367.6*	5500.1	5991.5	6249.5	5528.0
32.5°	4914.5	4891.9	4904.1	4935.4	4982.5	5209.0	*5742.3*	5918.3	6390.6	6676.4	5778.9
35°	5175.9	5156.8	5212.5	5280.5	5353.7	5670.9	*6259.9*	6413.3	6880.3	7208.0	6162.3
37.5°	5425.1	5416.4	5533.2	5676.1	5827.7	6225.1	*6786.2*	6904.7	7300.3	7786.6	6631.1
40°	5674.4	5672.6	5873.0	6124.0	6366.2	6777.5	*7185.3*	7282.9	7556.5	8236.2	7080.7
42.5°	5953.2	5953.2	6230.3	6564.9	6887.3	7244.6	*7478.1*	7521.7	7671.5	8495.9	7418.8
45°	6219.8	6235.5	6556.2	6944.8	7326.5	7608.8	*7680.3*	7683.7	7718.6	8649.2	7699.4
47.5°	6430.7	6444.6	6828.1	7275.9	7687.2	7885.9	*7896.4*	7880.7	7842.3	8795.6	7915.5
50°	6601.5	6622.4	7023.2	7497.3	7934.7	8152.5	*8232.7*	8217.0	8119.4	8952.5	8067.1
52.5°	6685.1	6714.8	7091.2	7607.1	8210.0	8609.1	*8832.2*	8868.8	8534.2	9039.6	8211.8
55°	6015.9	6059.5	6406.3	7112.1	8363.4	9314.9	*9665.2*	9658.3	8983.8	9299.3	8563.8
57.5°	*4543.3*	*4539.8*	*4827.4*	*5599.4*	*7143.5*	*9355.0*	*10177.6*	*10163.7*	*9403.8*	*9600.8*	*8924.6*
60°	3093.4	3072.4	3149.1	3522.1	4994.7	7621.0	*9262.7*	9450.9	9105.8	8868.8	7577.4
62.5°	2546.1	2527.0	2502.6	2399.8	2868.5	4747.2	*6399.3*	6685.1	6639.8	6164.1	4752.5
65°	2084.3	2100.0	2168.0	2124.4	1995.4	2434.6	*3321.7*	3490.7	3191.0	2685.6	1660.8
67.5°	1537.1	1544.1	1632.9	1863.0	1793.3	1620.7	*1563.2*	1591.1	932.4	428.7	277.1
70°	908.0	913.2	995.1	1303.6	1455.2	1244.3	*1056.1*	1040.4	369.5	115.0	125.5
72.5°	514.1	503.7	519.3	620.4	792.9	660.5	*543.7*	494.9	111.5	64.5	64.5
75°	244.0	237.0	203.9	191.7	174.3	111.5	*69.7*	59.3	27.9	26.1	26.1
77.5°	1.7	5.2	3.5	5.2	5.2	3.5	*1.7*	1.7	5.2	5.2	7.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	*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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REPORT NUMBER: P638473
CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6237.3	6237.3	6237.3	6237.3	6237.3	6237.3	6237.3	6237.3	6237.3	6237.3	6237.3
2.5°	6197.2	6144.9	6132.7	6129.2	6080.4	6028.1	5974.1	5953.2	5921.8	5902.7	5918.3
5°	6080.4	6005.5	5939.3	5878.3	5770.2	5651.7	5548.9	5482.7	5419.9	5378.1	5388.5
7.5°	5914.9	5817.3	5665.6	5510.5	5311.9	5134.1	4935.4	4813.4	4700.2	4637.4	4667.1
10°	5738.8	5609.9	5367.6	5104.5	4792.5	4513.7	4229.6	3997.8	3863.7	3736.4	3750.4
12.5°	5566.3	5395.5	5033.0	4633.9	4240.1	3828.8	3400.1	3079.4	2859.8	2701.2	2676.8
15°	5406.0	5186.4	4707.1	4180.8	3644.1	3096.8	2549.6	2091.3	1836.8	1680.0	1669.5
17.5°	5263.1	4991.2	4369.0	3706.8	3034.1	2333.5	1704.4	1361.1	1214.7	1146.7	1139.8
20°	5125.4	4794.3	4024.0	3225.8	2368.4	1638.2	1176.3	1017.8	970.7	942.8	946.3
22.5°	4992.9	4579.9	3661.5	2692.5	1775.9	1150.2	911.5	850.5	845.2	848.7	850.5
25°	4881.4	4383.0	3288.5	2178.4	1267.0	876.6	761.6	744.1	759.8	782.5	786.0
27.5°	4823.9	4222.7	2924.3	1660.8	916.7	712.8	660.5	667.5	695.4	719.8	723.2
30°	4839.6	4102.4	2547.9	1204.2	705.8	601.2	583.8	597.8	625.6	648.3	651.8
32.5°	4951.1	4041.4	2162.7	876.6	580.3	524.6	517.6	528.1	552.4	569.9	571.6
35°	5172.5	4055.4	1796.8	671.0	498.4	467.1	465.3	472.3	484.5	496.7	498.4
37.5°	5498.3	4168.6	1436.0	557.7	451.4	428.7	421.7	421.7	430.5	435.7	439.2
40°	5848.6	4339.4	1150.2	493.2	418.3	393.9	379.9	374.7	381.7	388.6	390.4
42.5°	6137.9	4510.2	934.1	447.9	392.1	359.0	341.6	338.1	346.8	359.0	362.5
45°	6359.3	4642.7	779.0	411.3	362.5	325.9	306.7	306.7	322.4	343.3	346.8
47.5°	6561.4	4749.0	664.0	378.2	334.6	296.3	277.1	280.6	306.7	334.6	339.8
50°	6699.1	4834.4	578.6	348.5	312.0	271.9	254.4	261.4	292.8	325.9	331.1
52.5°	6847.2	4938.9	522.8	322.4	291.0	252.7	237.0	242.2	277.1	313.7	320.7
55°	7256.8	5289.2	521.1	287.6	254.4	226.6	219.6	221.3	256.2	298.0	306.7
57.5°	*7591.4*	*5597.7*	*555.9*	*242.2*	*212.6*	*198.7*	*195.2*	*196.9*	*228.3*	*275.4*	*285.8*
60°	6280.8	4349.9	460.1	200.4	177.8	174.3	169.0	172.5	202.2	244.0	252.7
62.5°	3717.3	2486.9	219.6	153.4	151.6	148.1	142.9	149.9	177.8	214.4	219.6
65°	1270.5	737.2	139.4	125.5	129.0	123.7	118.5	125.5	149.9	170.8	172.5
67.5°	244.0	195.2	111.5	104.6	106.3	95.9	94.1	101.1	115.0	118.5	116.8
70°	127.2	113.3	85.4	85.4	81.9	68.0	68.0	74.9	74.9	69.7	68.0
72.5°	66.2	62.7	55.8	62.7	52.3	41.8	41.8	45.3	41.8	34.9	34.9
75°	26.1	26.1	24.4	31.4	22.7	19.2	17.4	20.9	15.7	12.2	12.2
77.5°	7.0	7.0	7.0	8.7	5.2	5.2	3.5	3.5	1.7	0.0	0.0
80°	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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

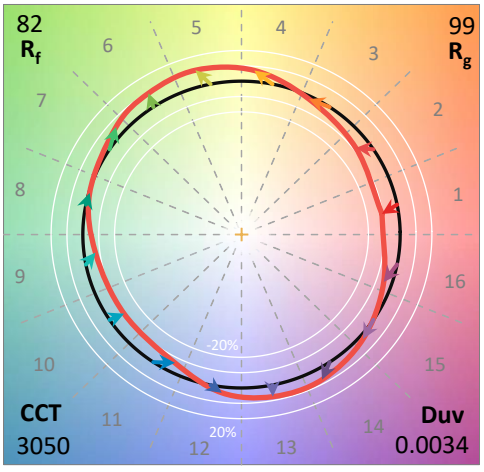
Test Information

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

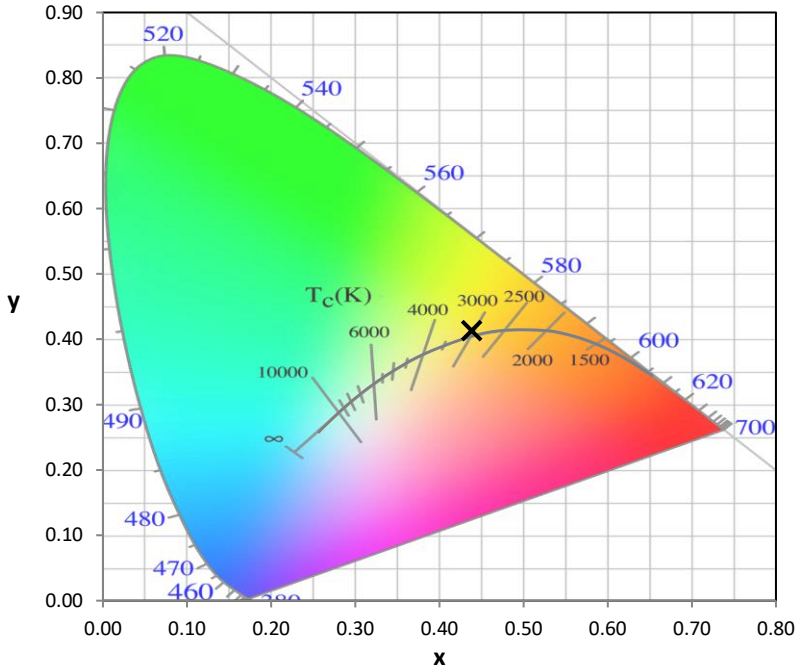
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

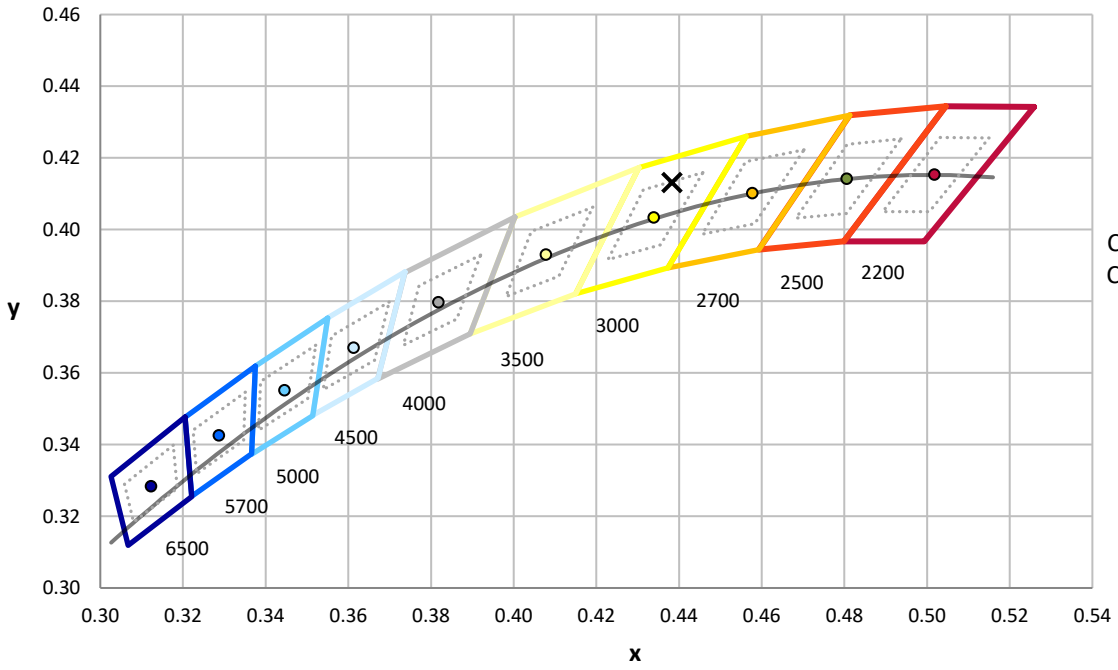
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

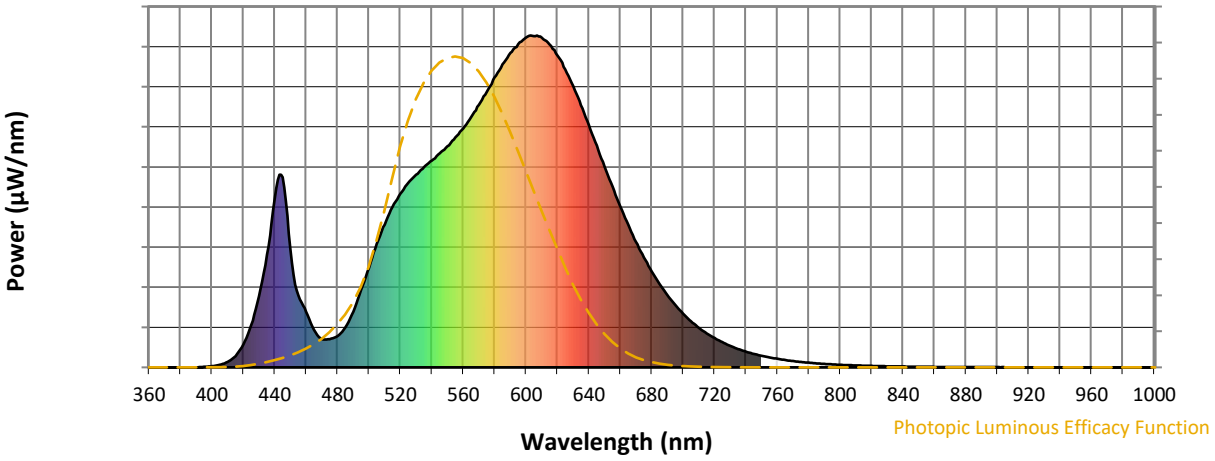


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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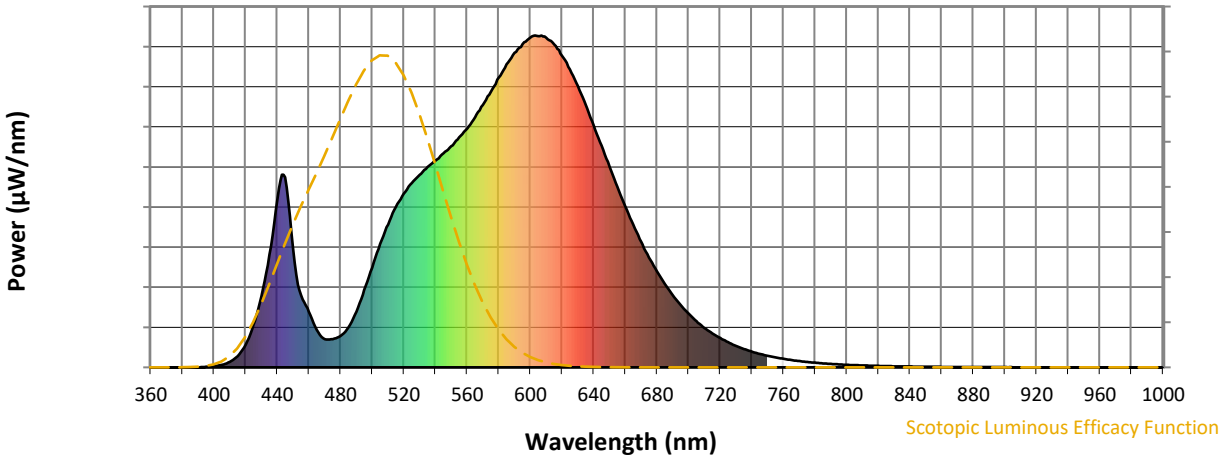
Scotopic Flux vs. Wavelength



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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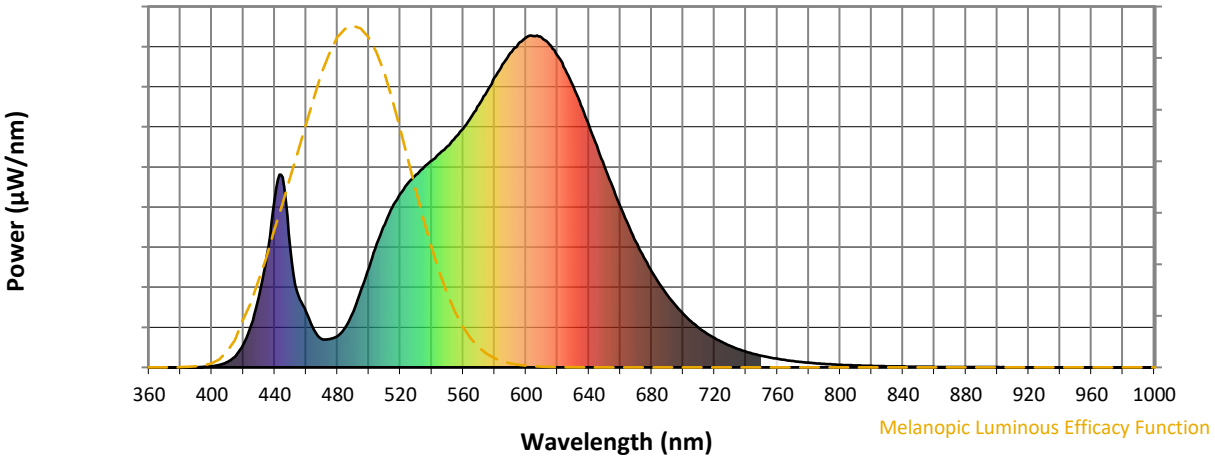
Melanopic Flux vs. Wavelength



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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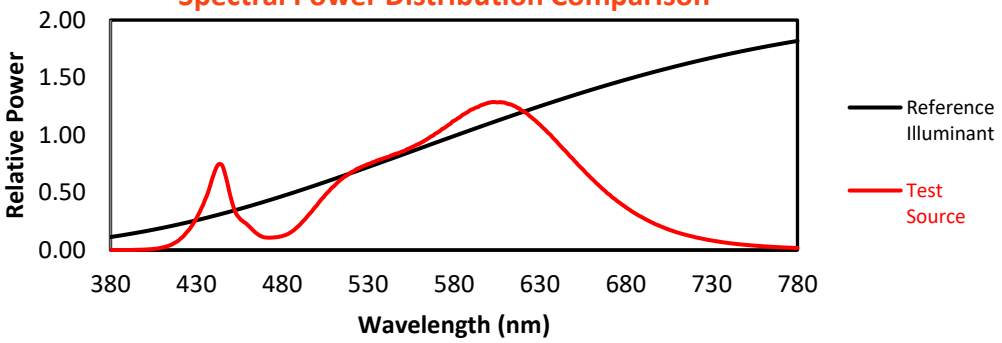
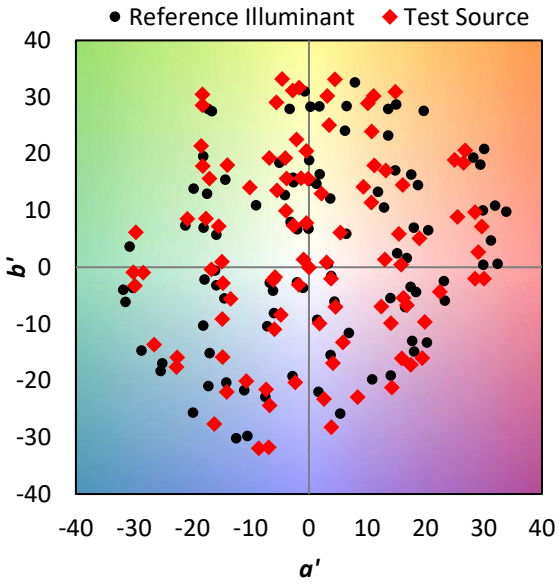
Summary

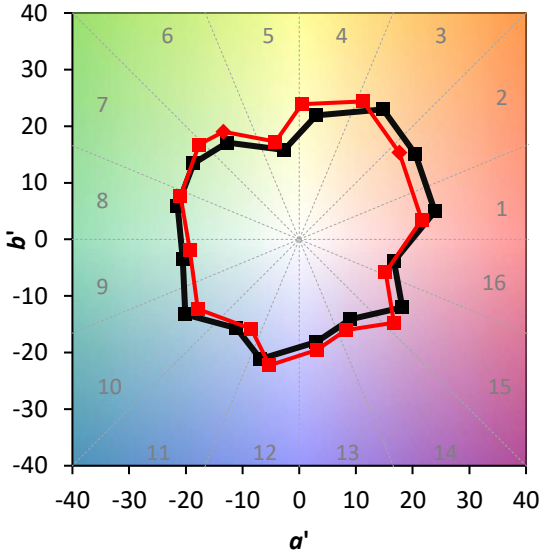
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

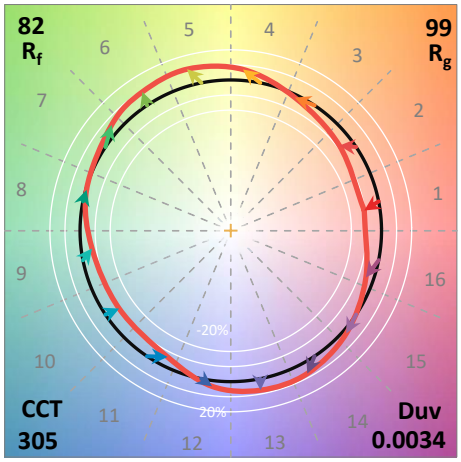
Spectral Power Distribution Comparison

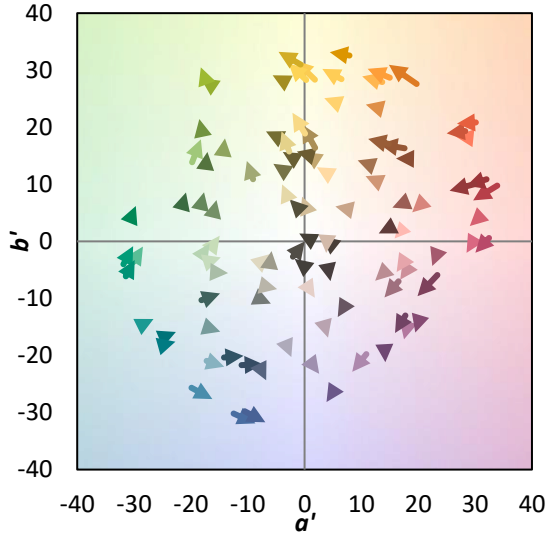


Color Vector Graphics









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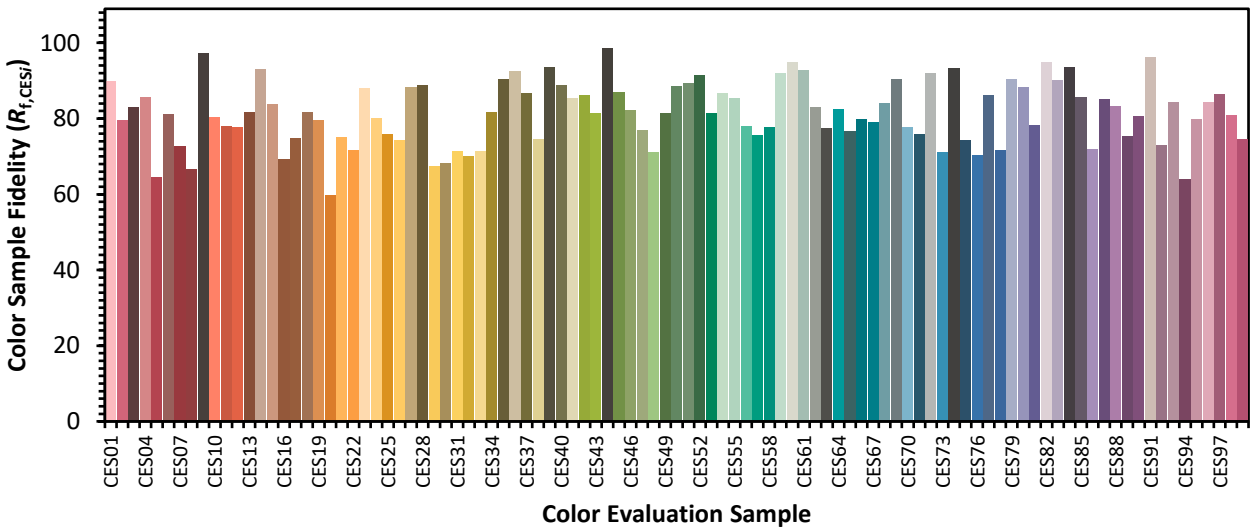
Individual Sample Fidelity Index ($R_{f,i}$)

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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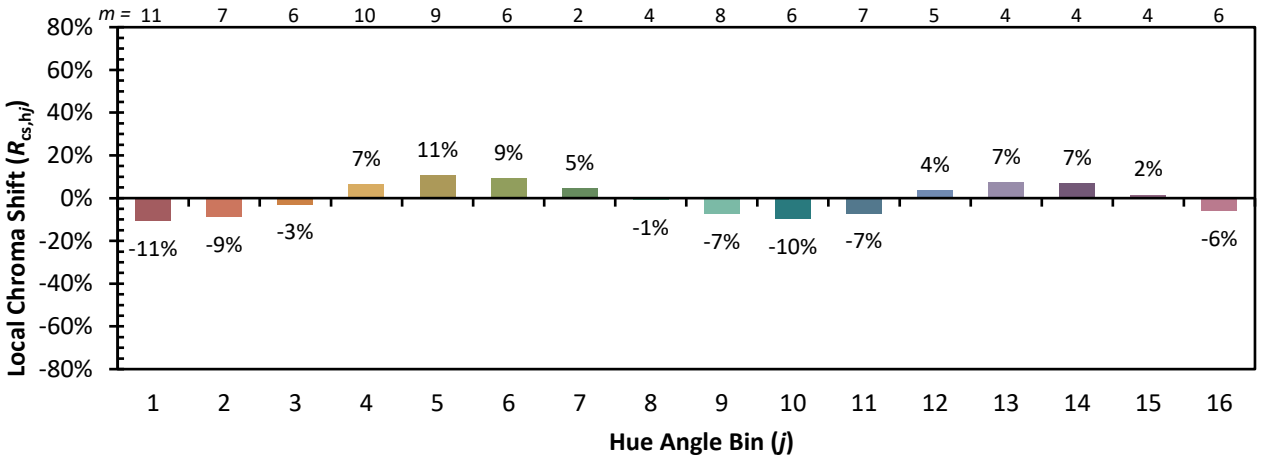
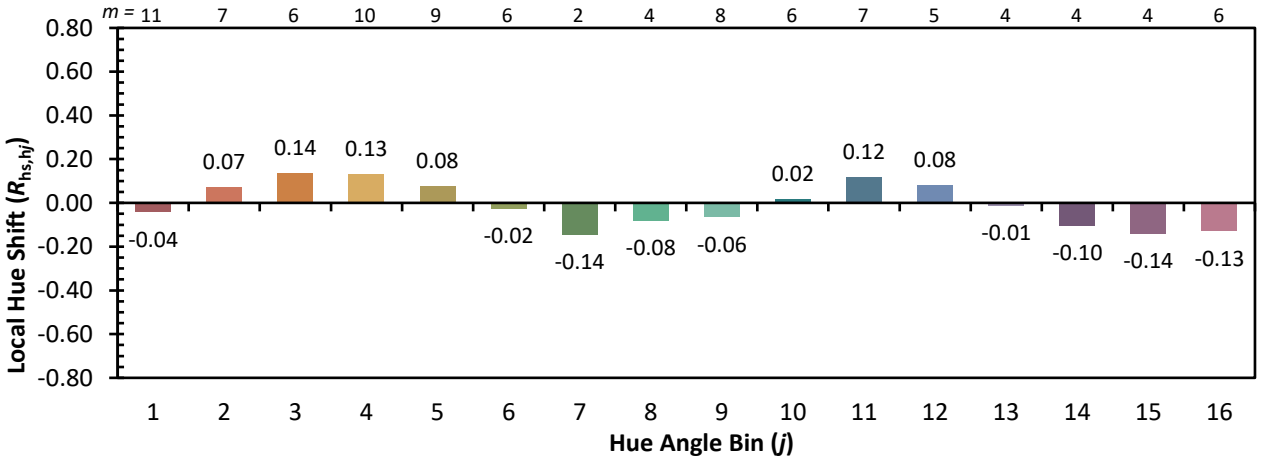
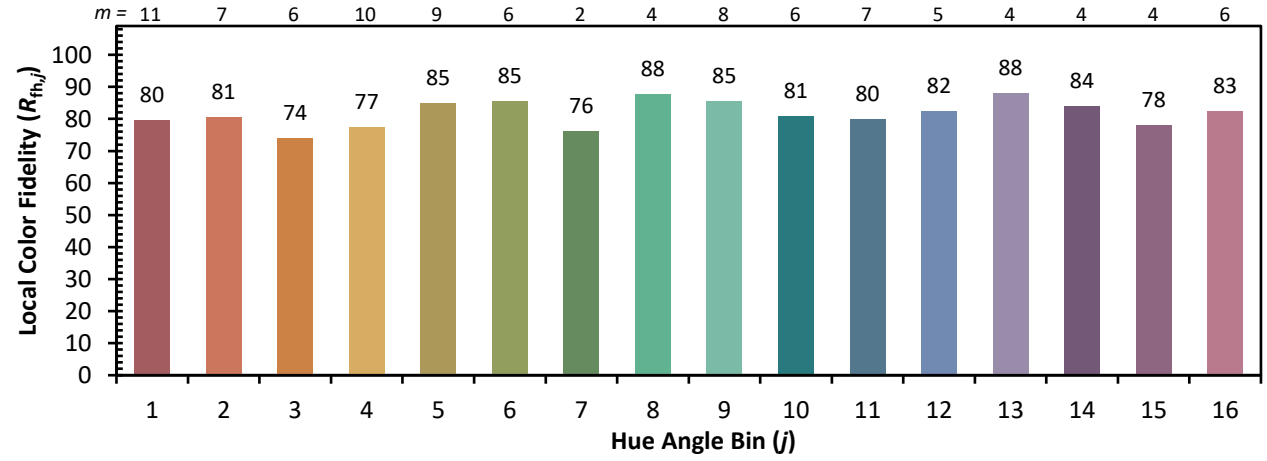
Color Rendition by Hue-Angle Bin







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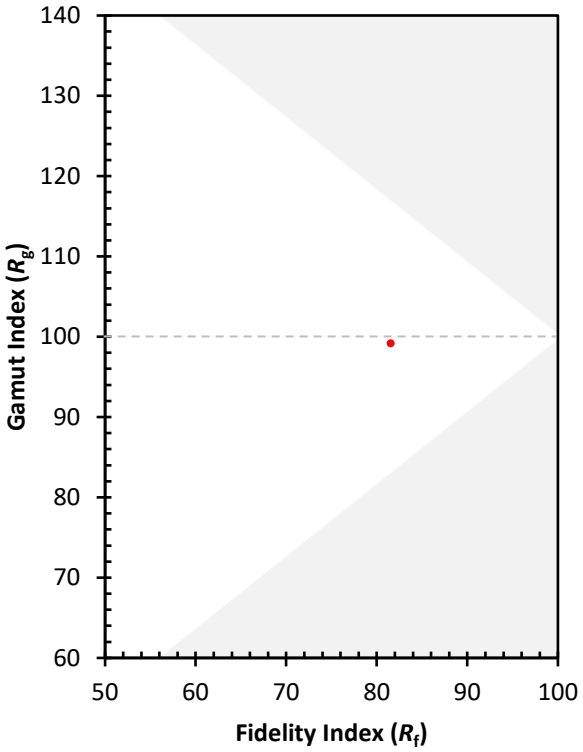
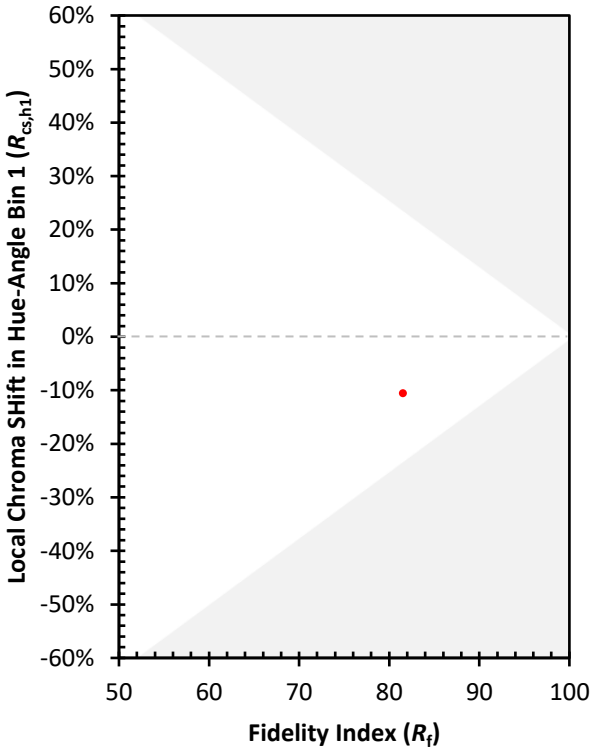
Measure Comparisons





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