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: P637978

Luminaire Tested: GWS-SA4D-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:	P637978
	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-SA4D-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:	11378.4 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:	B2 - U0 - G1

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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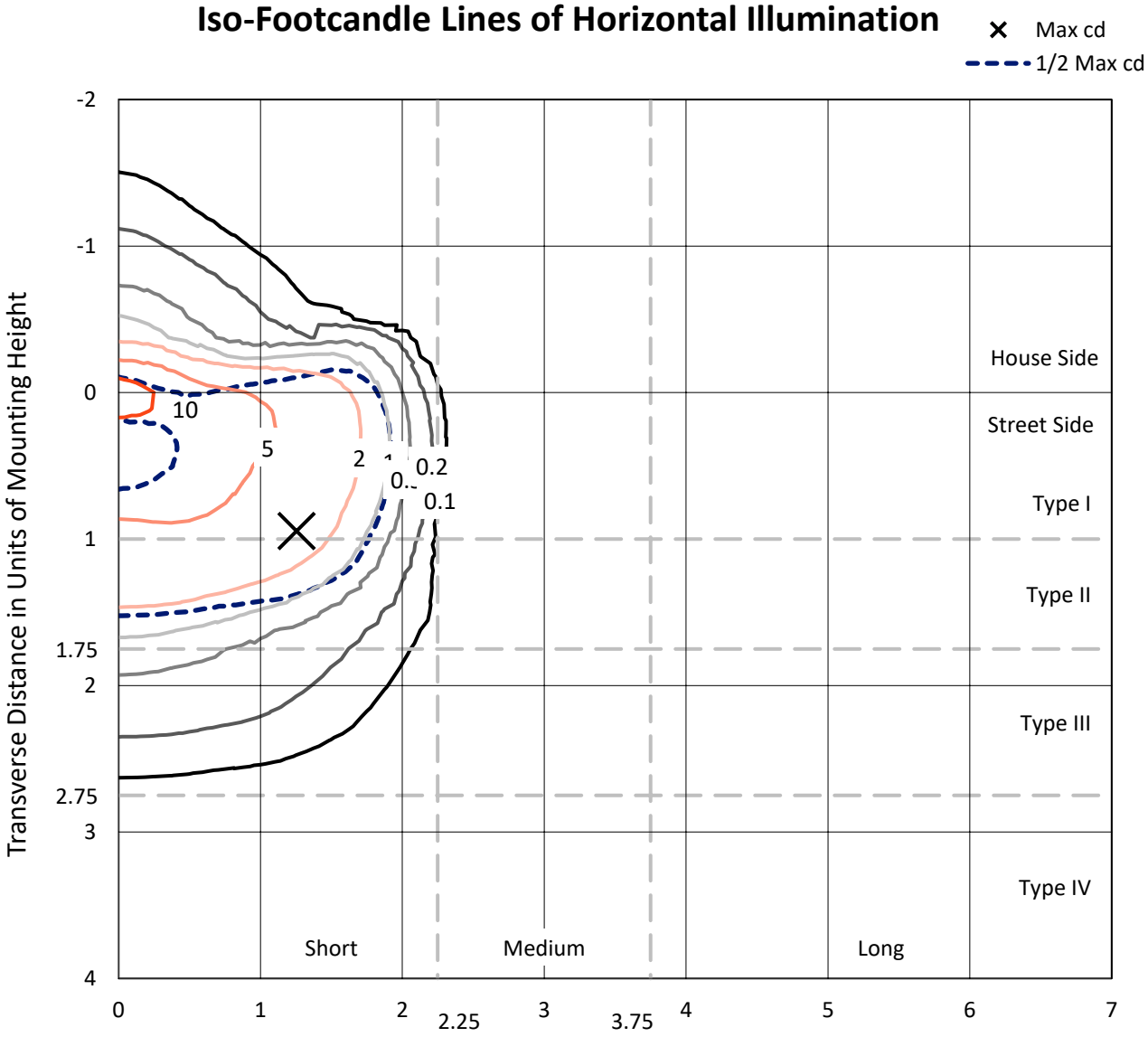
Scaled Data Report

REPORT NUMBER: P637978
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 12.5 fc
Type II - Short - N/A

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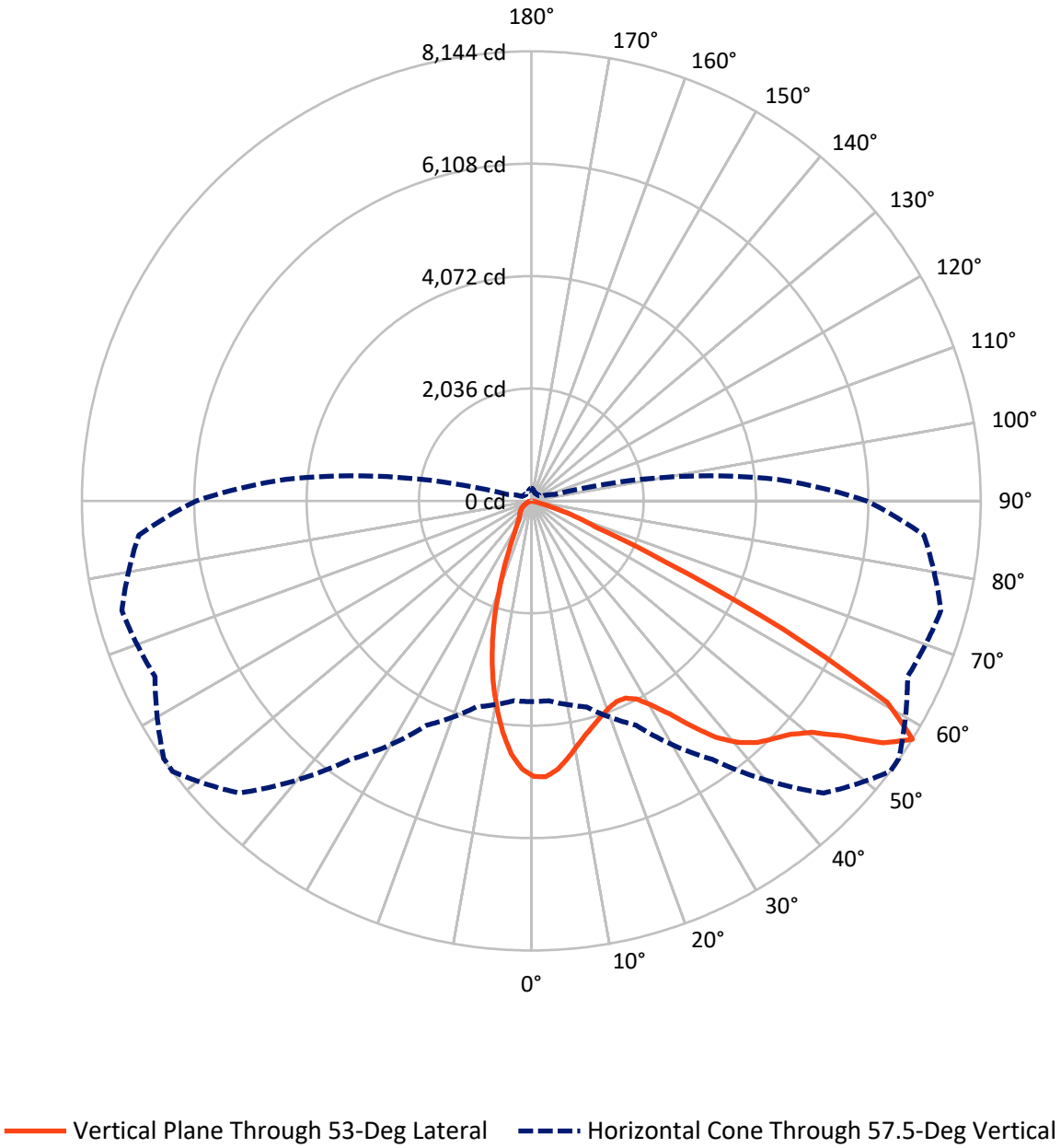
Luminous Intensity Polar Plot



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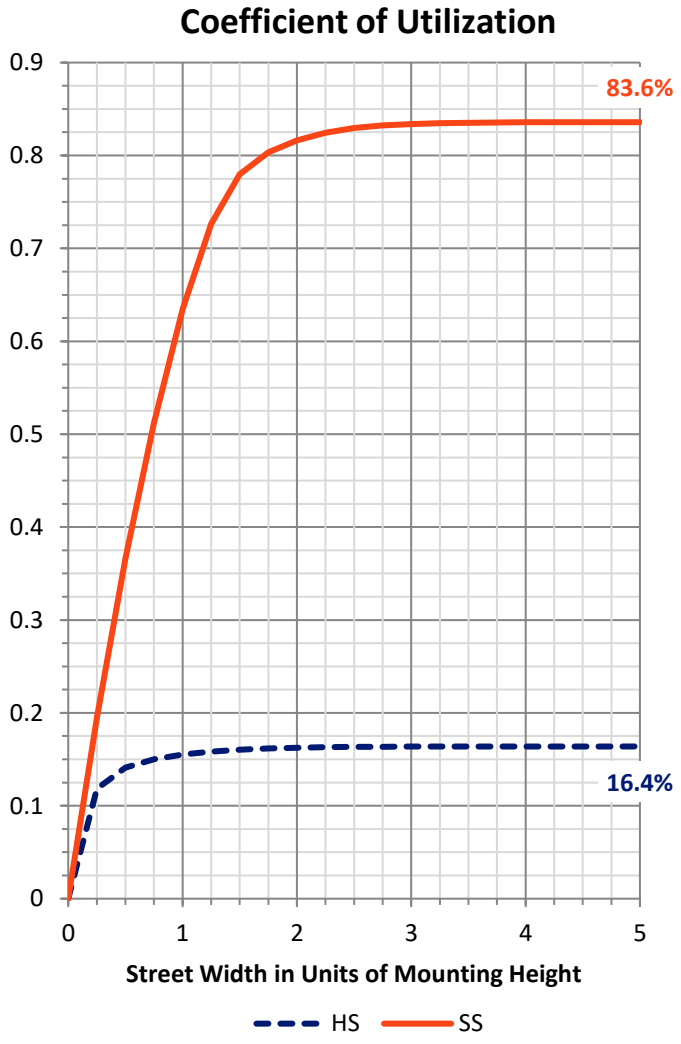
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1879.6	0.0	1879.6
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	9498.8	0.0	9498.8
	% Fixture	83.5	0.0	83.5
Total	Lumens	11378.4	0.0	11378.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	427.0	3.8
10°-20°	937.5	8.2
20°-30°	1221.3	10.7
30°-40°	1771.6	15.6
40°-50°	2556.2	22.5
50°-60°	3091.5	27.2
60°-70°	1260.0	11.1
70°-80°	113.2	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°	11378.4	100.0
0°-180°	11378.4	100.0



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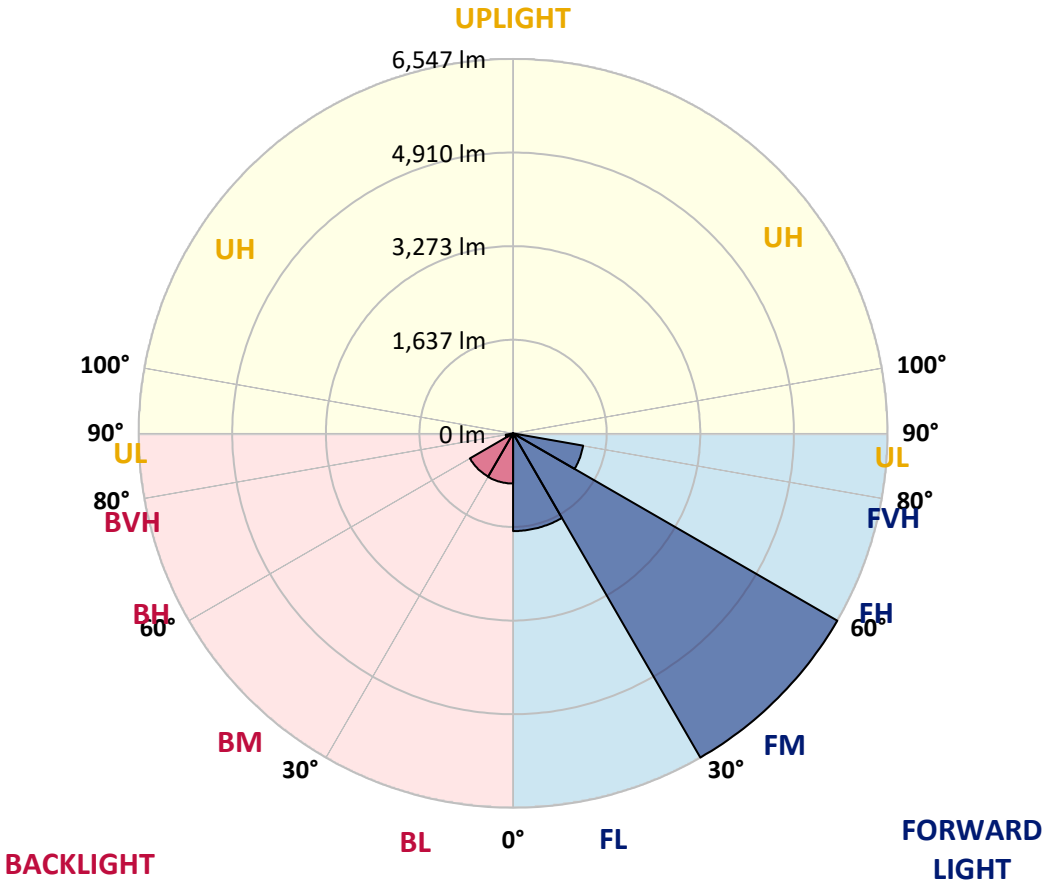
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1708.7	15.0			
FM	(30°-60°)	6546.9	57.5			
FH	(60°-80°)	1243.3	10.9			G1/1800
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	877.2	7.7	B2/1000		
BM	(30°-60°)	872.4	7.7	B1/1000		
BH	(60°-80°)	129.9	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: B2-U0-G1
Type II Short



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Scaled Data Report

REPORT NUMBER: P637978
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	4991.2	4991.2	4991.2	4991.2	4991.2	4991.2	*4991.2*	4991.2	4991.2	4991.2	4991.2
2.5°	4921.5	4932.6	4952.2	4977.3	4994.0	5002.4	*5002.4*	5026.1	5010.7	4998.2	4984.2
5°	4710.9	4722.1	4748.6	4789.0	4829.4	4858.7	*4892.2*	4917.3	4927.1	4927.1	4903.4
7.5°	4413.9	4429.2	4445.9	4501.7	4589.6	4655.1	*4712.3*	4748.6	4801.6	4818.3	4784.8
10°	4094.5	4109.8	4147.5	4224.2	4324.6	4422.2	*4519.8*	4565.9	4656.5	4703.9	4666.3
12.5°	3823.9	3830.9	3881.1	3973.2	4101.5	4235.4	*4353.9*	4401.3	4529.6	4600.7	4556.1
15°	3600.8	3605.0	3655.2	3757.0	3904.8	4069.4	*4218.6*	4267.4	4425.0	4532.4	4465.5
17.5°	3432.1	3433.5	3476.7	3586.9	3741.7	3924.4	*4101.5*	4161.4	4365.0	4494.7	4394.3
20°	3347.0	3342.8	3373.5	3469.7	3616.2	3798.8	*4008.0*	4081.9	4331.6	4489.2	4339.9
22.5°	3348.4	3338.6	3351.2	3419.5	3543.6	3715.2	*3949.5*	4033.1	4334.4	4512.9	4293.9
25°	3427.9	3413.9	3416.7	3453.0	3540.8	3697.0	*3957.8*	4047.1	4390.1	4592.4	4277.2
27.5°	3561.8	3546.4	3546.4	3564.6	3612.0	3754.2	*4062.4*	4164.2	4539.4	4747.2	4312.1
30°	3734.7	3719.4	3713.8	3731.9	3771.0	3902.0	*4295.3*	4401.3	4794.6	5001.0	4423.6
32.5°	3932.7	3914.6	3924.4	3949.5	3987.1	4168.4	*4595.2*	4736.0	5113.9	5342.6	4624.4
35°	4141.9	4126.6	4171.2	4225.6	4284.2	4538.0	*5009.3*	5132.1	5505.8	5768.0	4931.2
37.5°	4341.3	4334.4	4427.8	4542.2	4663.5	4981.5	*5430.5*	5525.3	5841.9	6231.0	5306.4
40°	4540.8	4539.4	4699.7	4900.6	5094.4	5423.5	*5749.9*	5828.0	6046.9	6590.8	5666.2
42.5°	4763.9	4763.9	4985.6	5253.4	5511.4	5797.3	*5984.2*	6019.0	6139.0	6798.6	5936.7
45°	4977.3	4989.8	5246.4	5557.4	5862.8	6088.8	*6145.9*	6148.7	6176.6	6921.3	6161.3
47.5°	5146.0	5157.2	5464.0	5822.4	6151.5	6310.5	*6318.9*	6306.3	6275.6	7038.5	6334.2
50°	5282.7	5299.4	5620.2	5999.5	6349.5	6523.9	*6588.0*	6575.5	6497.4	7164.0	6455.5
52.5°	5349.6	5373.3	5674.6	6087.4	6569.9	6889.2	*7067.7*	7097.0	6829.3	7233.7	6571.3
55°	4814.1	4849.0	5126.5	5691.3	6692.6	7454.0	*7734.4*	7728.8	7189.1	7441.5	6853.0
57.5°	*3635.7*	*3632.9*	*3863.0*	*4480.8*	*5716.4*	*7486.1*	*8144.4*	*8133.2*	*7525.2*	*7682.8*	*7141.7*
60°	2475.4	2458.7	2520.0	2818.5	3996.9	6098.5	*7412.2*	7562.8	7286.7	7097.0	6063.6
62.5°	2037.5	2022.1	2002.6	1920.3	2295.5	3798.8	*5120.9*	5349.6	5313.4	4932.6	3803.0
65°	1667.9	1680.5	1734.9	1700.0	1596.8	1948.2	*2658.1*	2793.4	2553.5	2149.1	1329.0
67.5°	1230.0	1235.6	1306.7	1490.8	1435.0	1297.0	*1250.9*	1273.3	746.1	343.1	221.7
70°	726.6	730.8	796.3	1043.1	1164.5	995.7	*845.1*	832.6	295.7	92.0	100.4
72.5°	411.4	403.0	415.6	496.5	634.5	528.5	*435.1*	396.1	89.3	51.6	51.6
75°	195.2	189.7	163.2	153.4	139.5	89.3	*55.8*	47.4	22.3	20.9	20.9
77.5°	1.4	4.2	2.8	4.2	4.2	2.8	*1.4*	1.4	4.2	4.2	5.6
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: P637978
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4991.2	4991.2	4991.2	4991.2	4991.2	4991.2	4991.2	4991.2	4991.2	4991.2	4991.2
2.5°	4959.1	4917.3	4907.5	4904.8	4865.7	4823.9	4780.6	4763.9	4738.8	4723.5	4736.0
5°	4865.7	4805.7	4752.7	4703.9	4617.5	4522.6	4440.4	4387.4	4337.2	4303.7	4312.1
7.5°	4733.2	4655.1	4533.8	4409.7	4250.7	4108.4	3949.5	3851.8	3761.2	3711.0	3734.7
10°	4592.4	4489.2	4295.3	4084.7	3835.1	3612.0	3384.7	3199.2	3091.8	2990.0	3001.1
12.5°	4454.3	4317.6	4027.6	3708.2	3393.0	3063.9	2720.8	2464.2	2288.5	2161.6	2142.1
15°	4326.0	4150.3	3766.8	3345.6	2916.1	2478.2	2040.3	1673.5	1469.9	1344.4	1336.0
17.5°	4211.6	3994.1	3496.2	2966.3	2428.0	1867.3	1363.9	1089.2	972.0	917.6	912.1
20°	4101.5	3836.5	3220.1	2581.4	1895.2	1310.9	941.3	814.4	776.8	754.5	757.3
22.5°	3995.5	3665.0	2930.0	2154.6	1421.1	920.4	729.4	680.6	676.4	679.2	680.6
25°	3906.2	3507.4	2631.6	1743.2	1013.9	701.5	609.4	595.5	608.0	626.2	629.0
27.5°	3860.2	3379.1	2340.1	1329.0	733.6	570.4	528.5	534.1	556.4	576.0	578.8
30°	3872.8	3282.8	2038.9	963.7	564.8	481.1	467.2	478.3	500.7	518.8	521.6
32.5°	3962.0	3234.0	1730.7	701.5	464.4	419.8	414.2	422.6	442.1	456.0	457.4
35°	4139.1	3245.2	1437.8	536.9	398.9	373.7	372.4	377.9	387.7	397.5	398.9
37.5°	4399.9	3335.8	1149.1	446.3	361.2	343.1	337.5	337.5	344.5	348.6	351.4
40°	4680.2	3472.5	920.4	394.7	334.7	315.2	304.0	299.8	305.4	311.0	312.4
42.5°	4911.7	3609.2	747.5	358.4	313.8	287.3	273.3	270.5	277.5	287.3	290.1
45°	5088.8	3715.2	623.4	329.1	290.1	260.8	245.4	245.4	258.0	274.7	277.5
47.5°	5250.6	3800.2	531.3	302.6	267.8	237.1	221.7	224.5	245.4	267.8	271.9
50°	5360.8	3868.6	463.0	278.9	249.6	217.6	203.6	209.2	234.3	260.8	265.0
52.5°	5479.3	3952.3	418.4	258.0	232.9	202.2	189.7	193.8	221.7	251.0	256.6
55°	5807.0	4232.6	417.0	230.1	203.6	181.3	175.7	177.1	205.0	238.5	245.4
57.5°	*6074.8*	*4479.4*	*444.9*	*193.8*	*170.1*	*159.0*	*156.2*	*157.6*	*182.7*	*220.3*	*228.7*
60°	5026.1	3480.9	368.2	160.4	142.2	139.5	135.3	138.1	161.8	195.2	202.2
62.5°	2974.6	1990.1	175.7	122.7	121.3	118.5	114.4	119.9	142.2	171.5	175.7
65°	1016.7	589.9	111.6	100.4	103.2	99.0	94.8	100.4	119.9	136.7	138.1
67.5°	195.2	156.2	89.3	83.7	85.1	76.7	75.3	80.9	92.0	94.8	93.4
70°	101.8	90.6	68.3	68.3	65.5	54.4	54.4	60.0	60.0	55.8	54.4
72.5°	53.0	50.2	44.6	50.2	41.8	33.5	33.5	36.3	33.5	27.9	27.9
75°	20.9	20.9	19.5	25.1	18.1	15.3	13.9	16.7	12.6	9.8	9.8
77.5°	5.6	5.6	5.6	7.0	4.2	4.2	2.8	2.8	1.4	0.0	0.0
80°	0.0	1.4	0.0	1.4	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

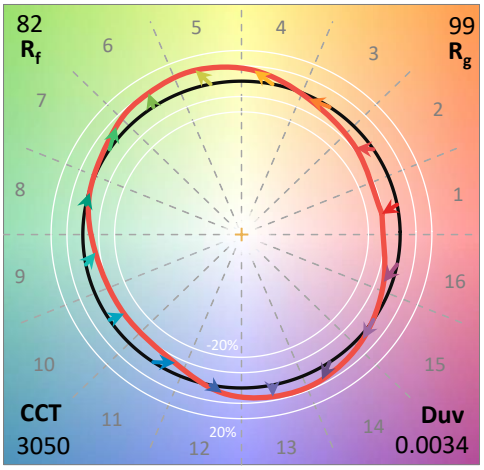
Test Information

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

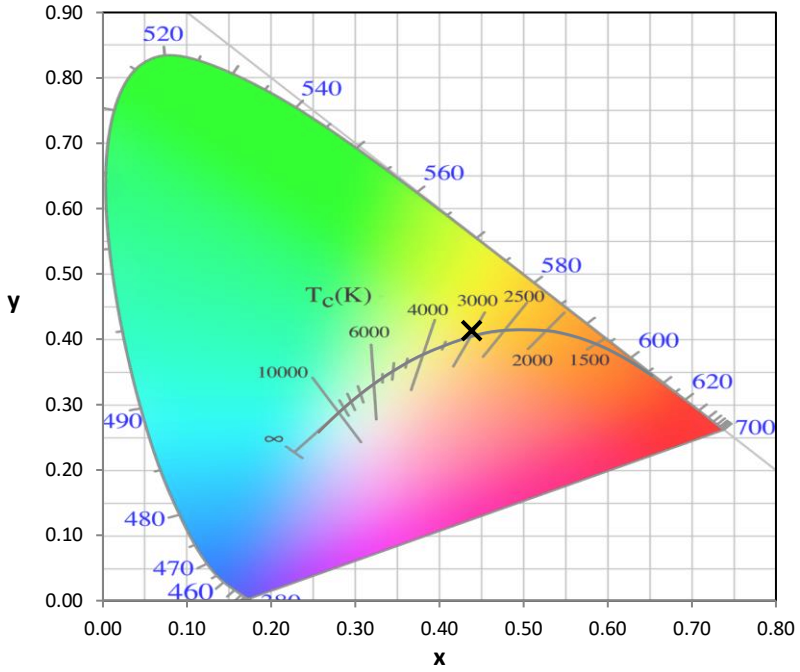
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

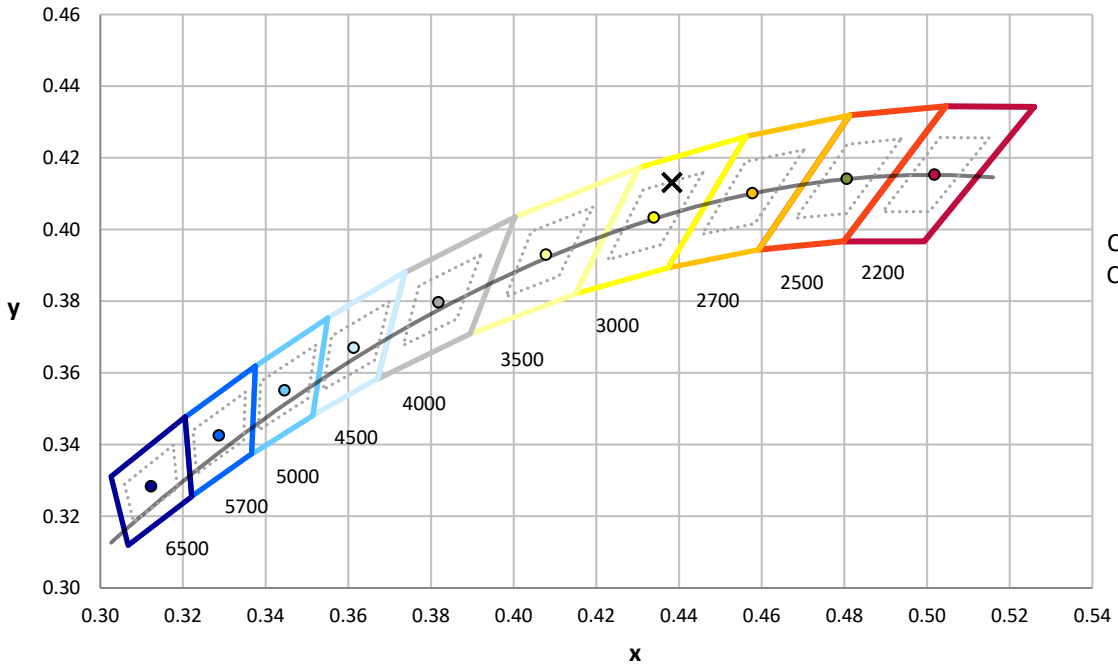
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

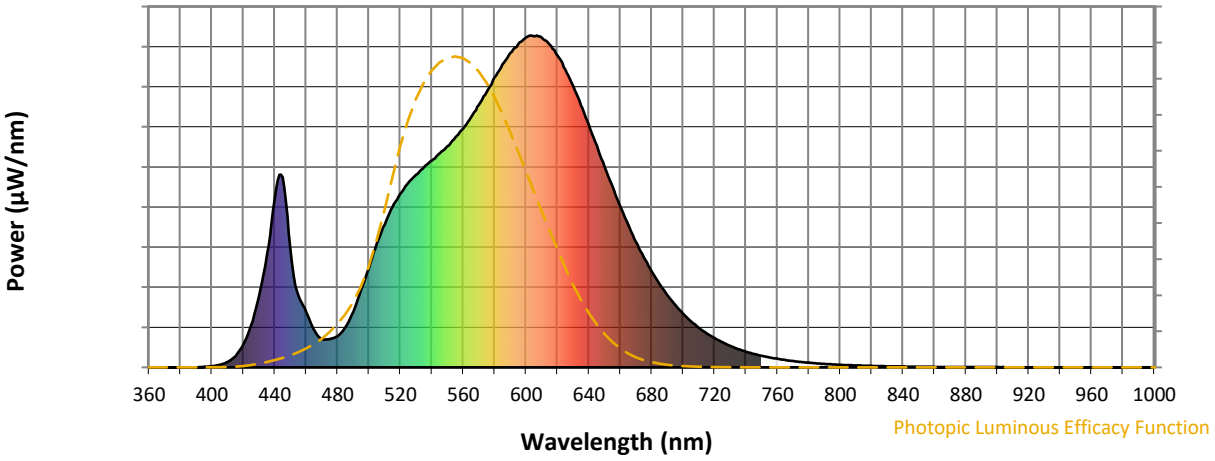


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

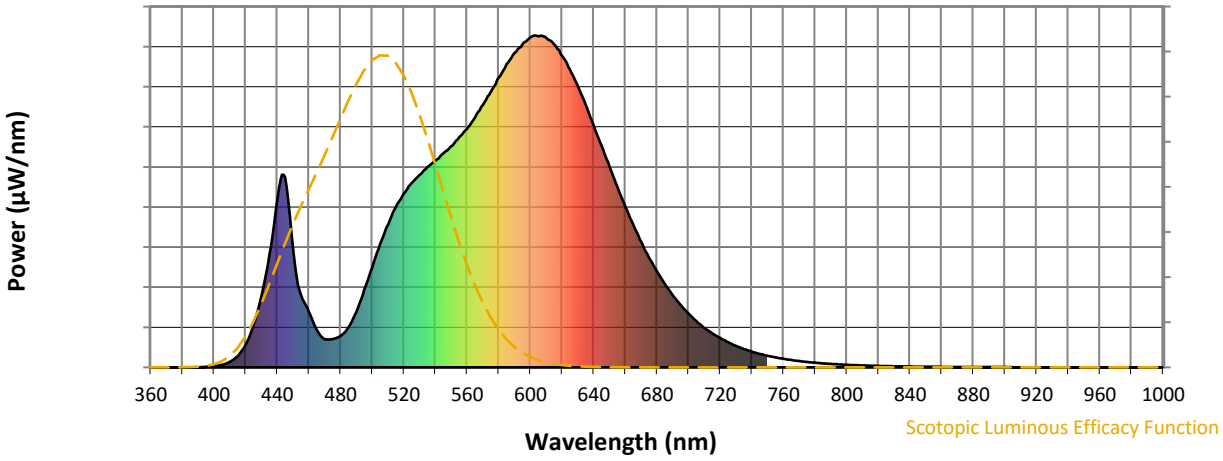


Photopic Lumens: NR

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			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength

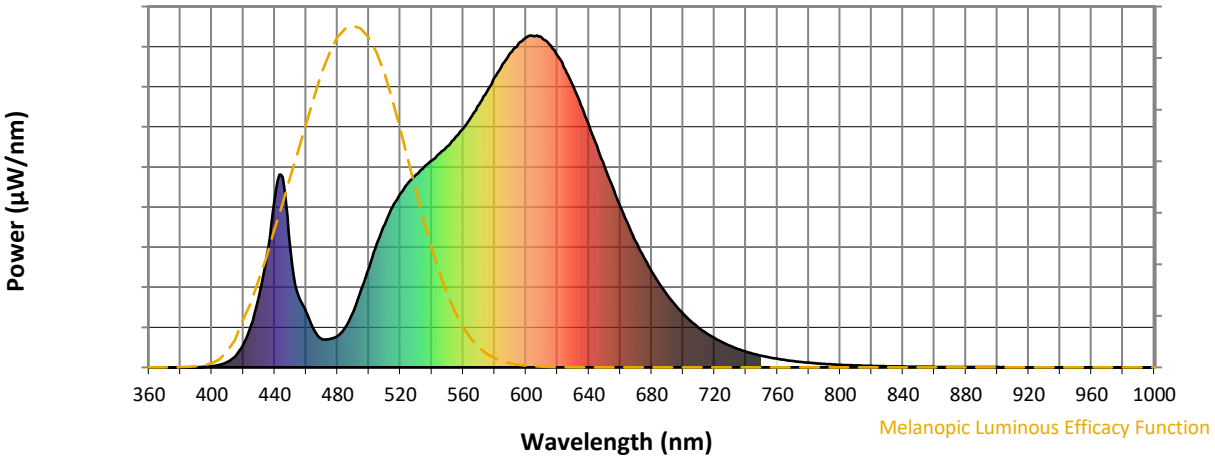


Scotopic Lumens: NR **S/P: 1.27**

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			

REPORT NUMBER: SP1-2408-195-9

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			

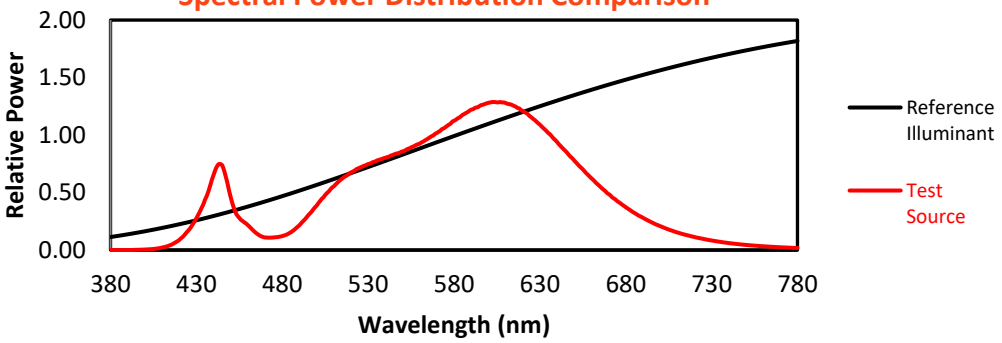
REPORT NUMBER: SP1-2408-195-9

TM-30-18

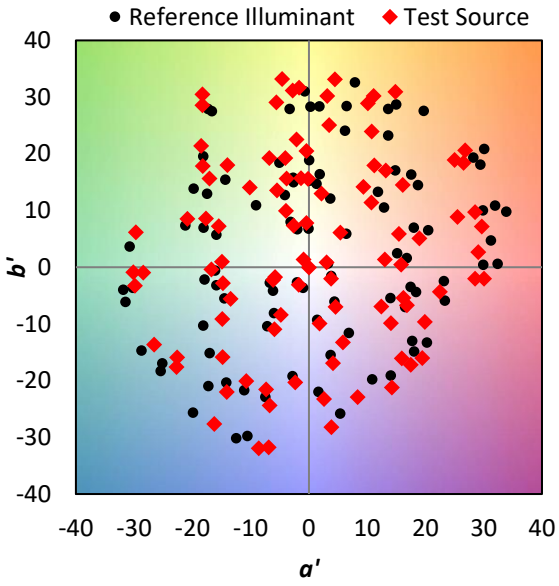
Summary

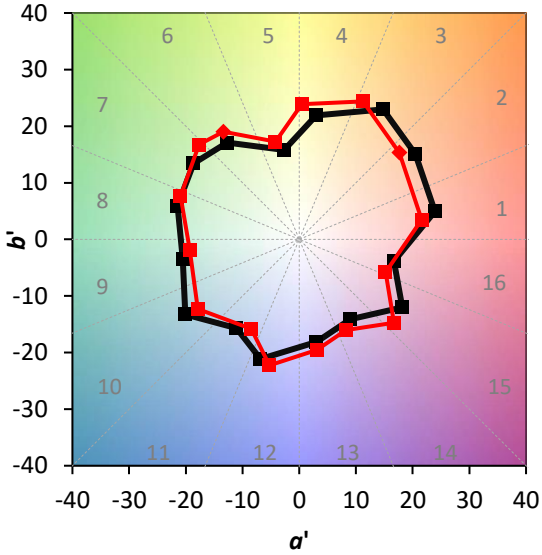
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

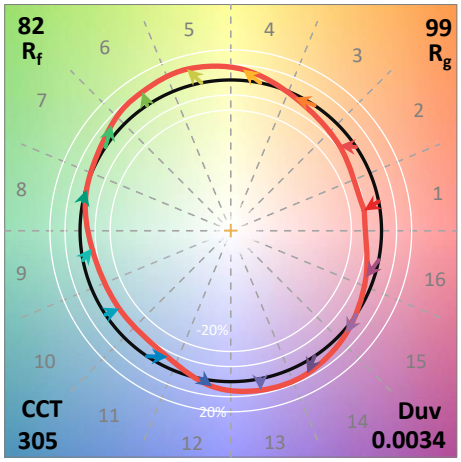
Spectral Power Distribution Comparison

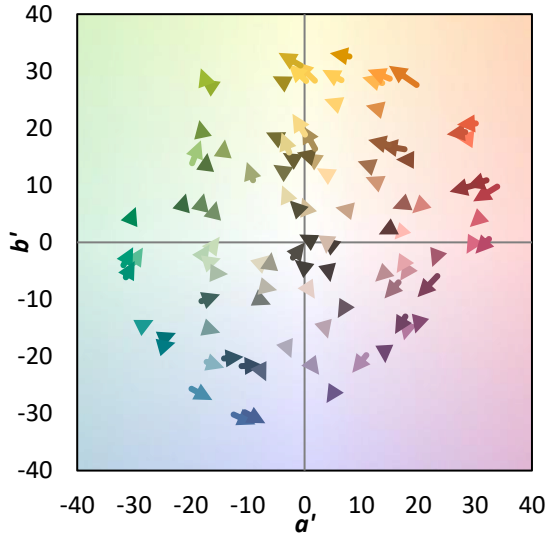


Color Vector Graphics







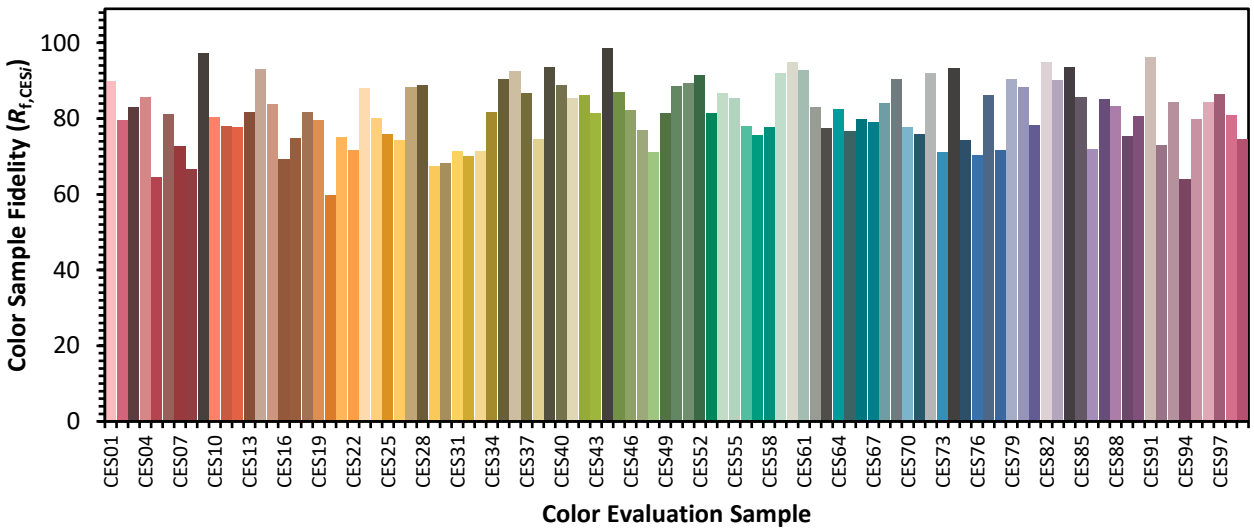


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

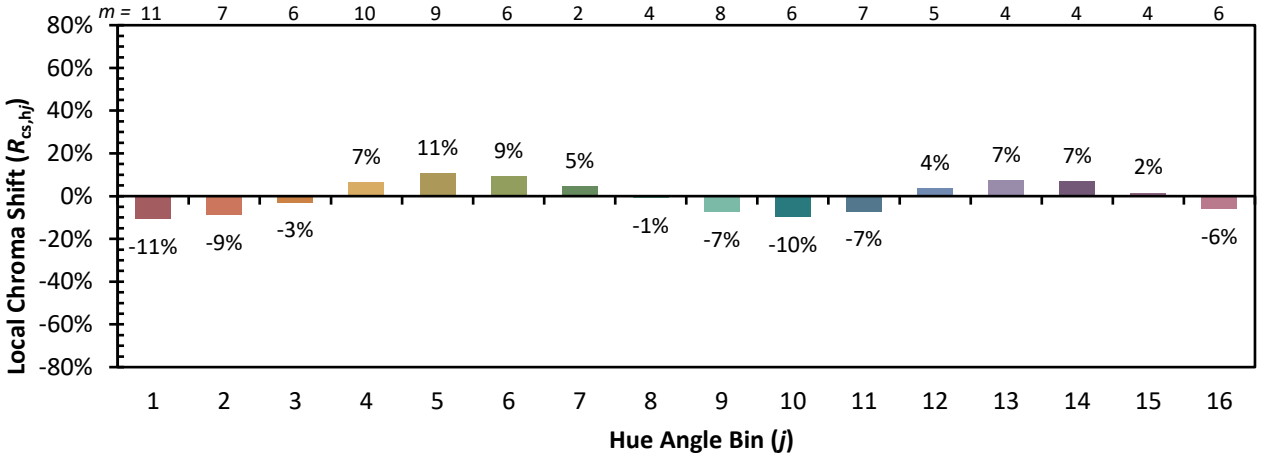
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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	

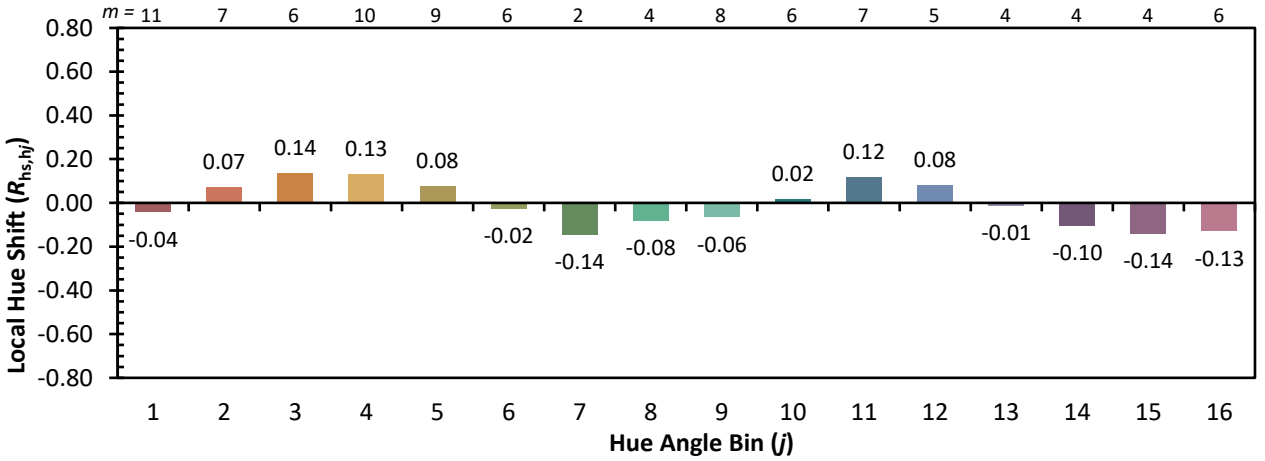


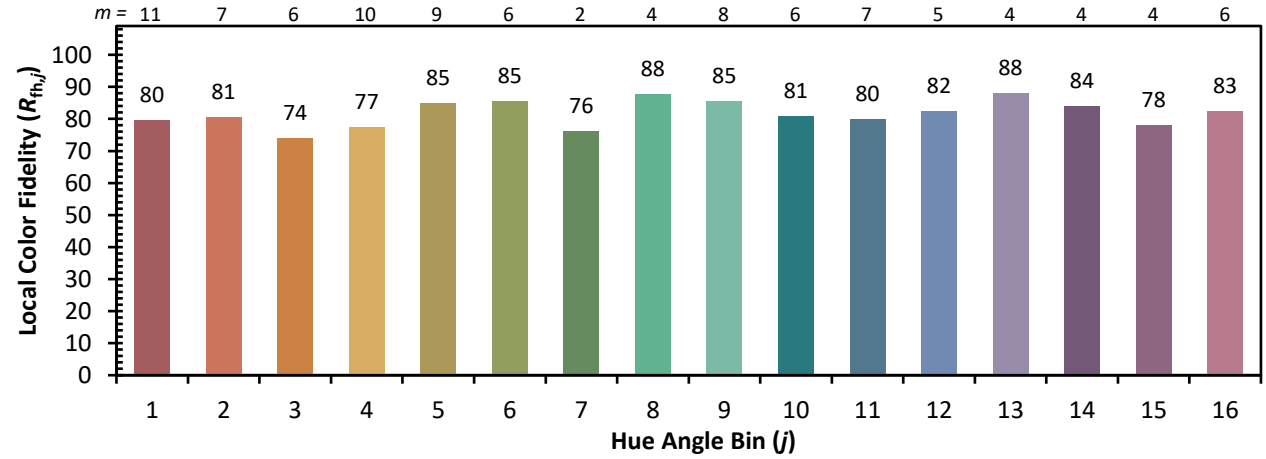
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



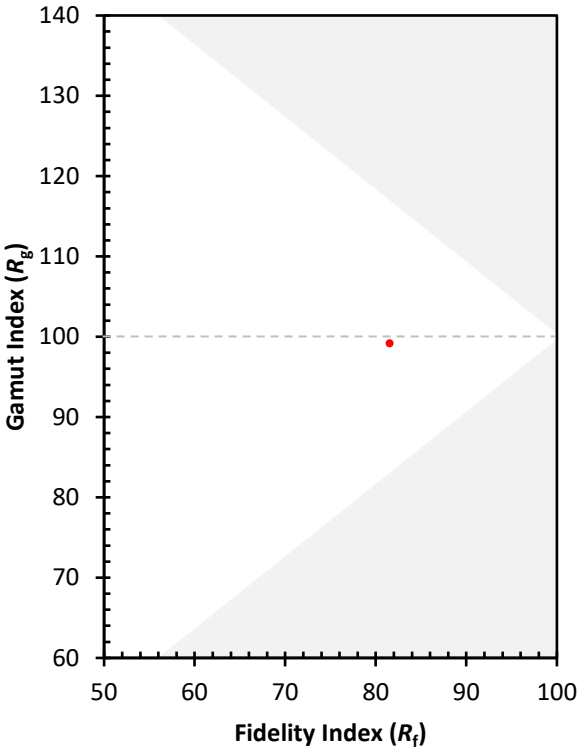


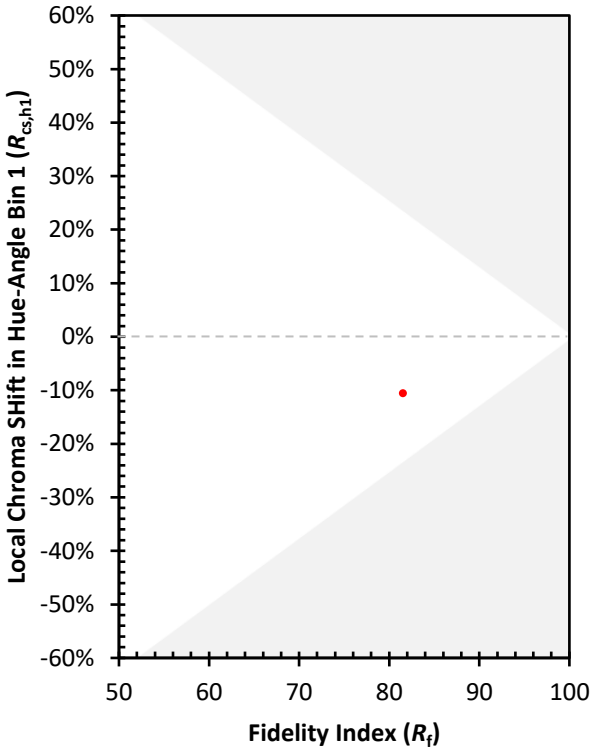


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





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