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: P638967

Luminaire Tested: GWS-SA4F-830-U-SL2-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:	P638967
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-27)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-SL2-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	26560.8 lumens
Efficiency:	N/A
Efficacy:	117.9 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G4

Input Watts (W):	225.3
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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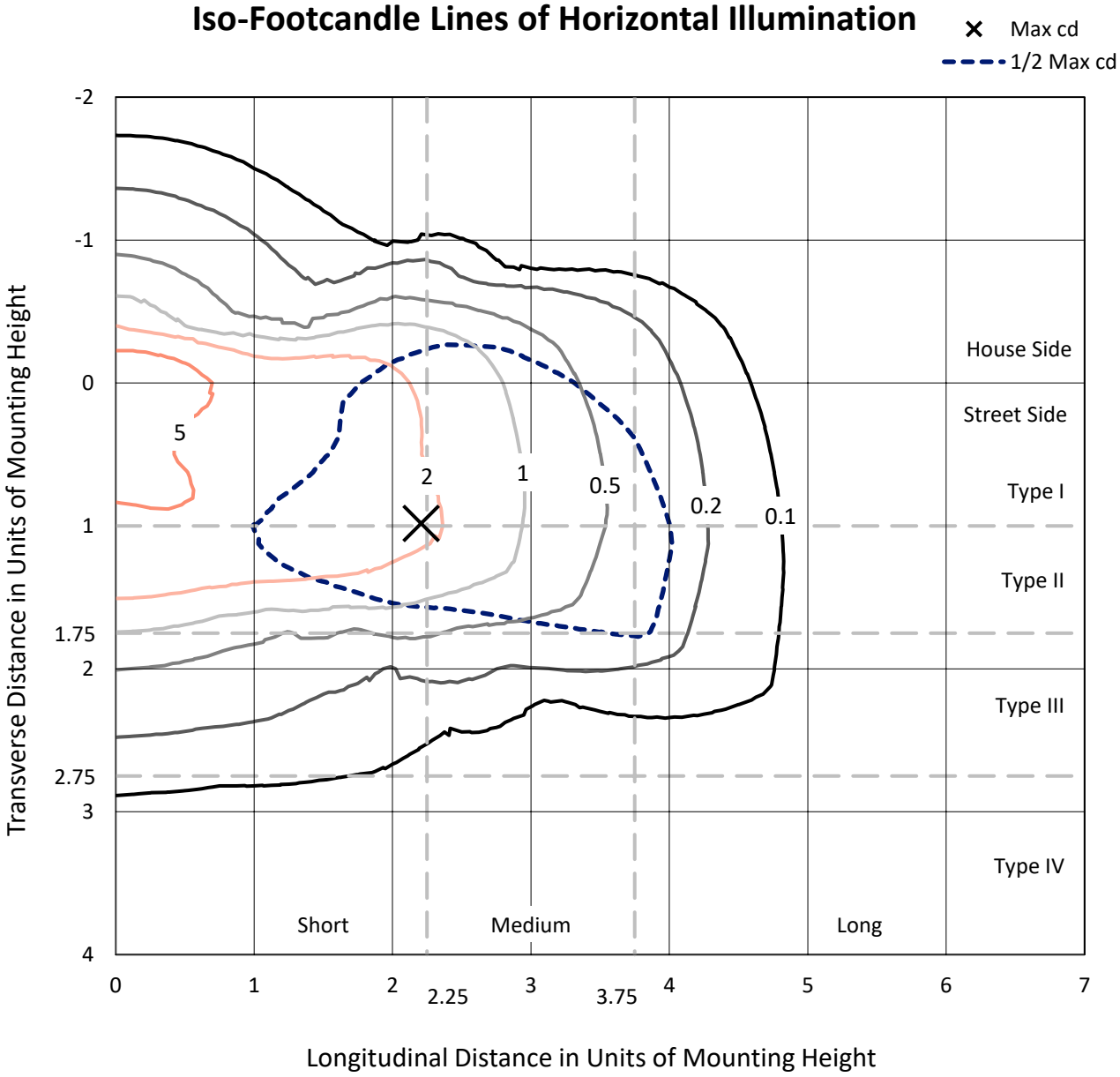
Scaled Data Report

REPORT NUMBER: P638967
CATALOG NUMBER: GWS-SA4F-830-U-SL2-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
Type II - Short - N/A

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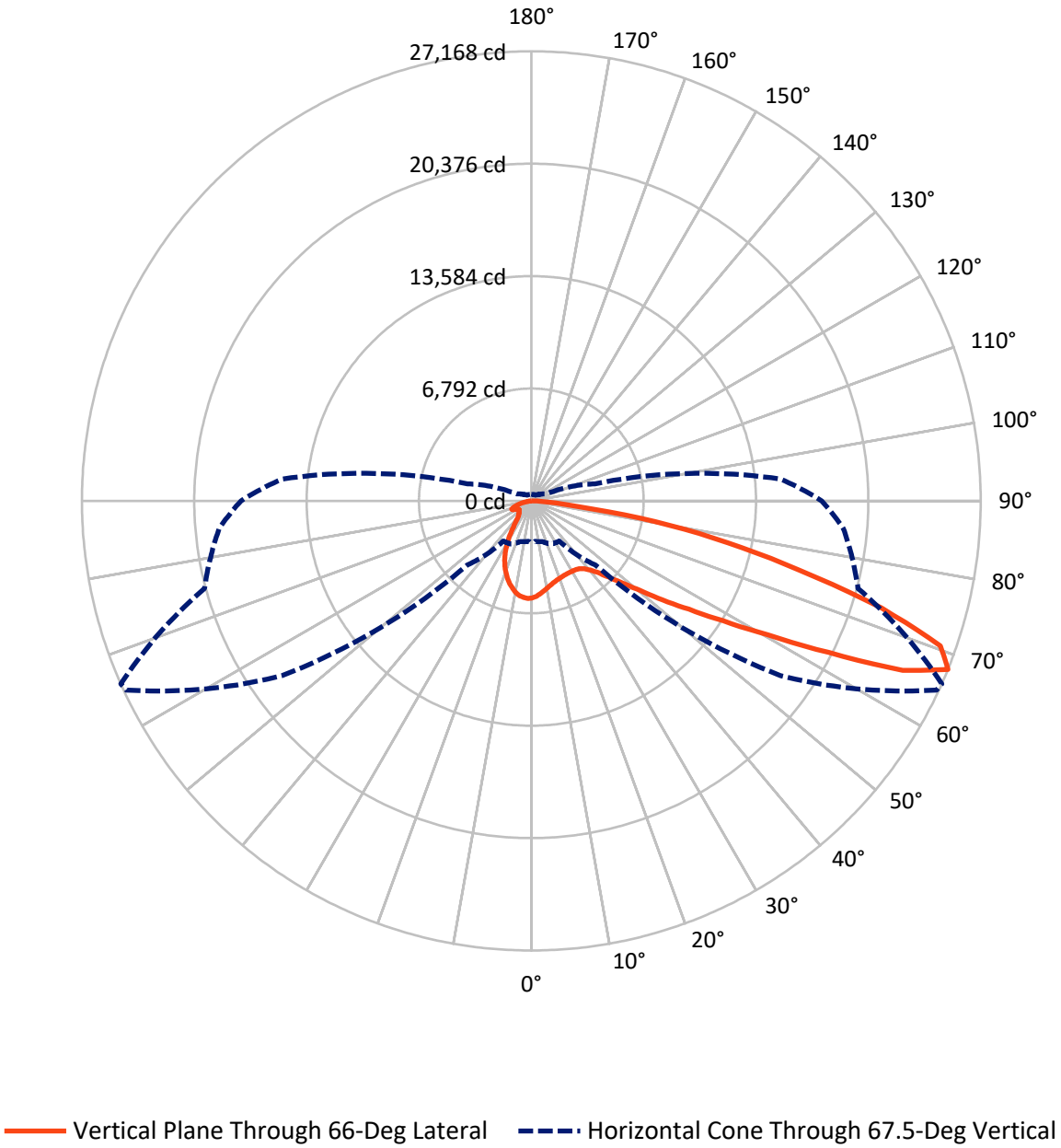
Luminous Intensity Polar Plot



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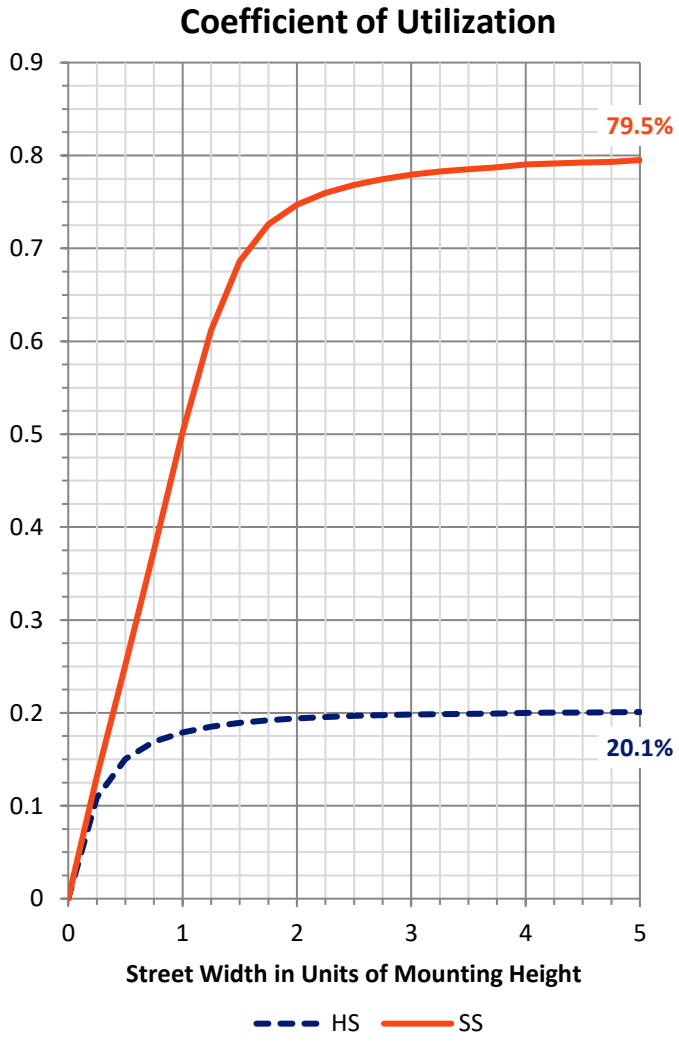
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5389.8	0.0	5389.8
	% Fixture	20.3	0.0	20.3
Street Side	Lumens	21171.0	0.0	21171.0
	% Fixture	79.7	0.0	79.7
Total	Lumens	26560.8	0.0	26560.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	515.1	1.9
10°-20°	1265.9	4.8
20°-30°	1740.0	6.6
30°-40°	2378.9	9.0
40°-50°	3604.7	13.6
50°-60°	5603.6	21.1
60°-70°	6822.2	25.7
70°-80°	4155.8	15.6
80°-90°	474.7	1.8
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°	26560.8	100.0
0°-180°	26560.8	100.0



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REPORT NUMBER: P638967
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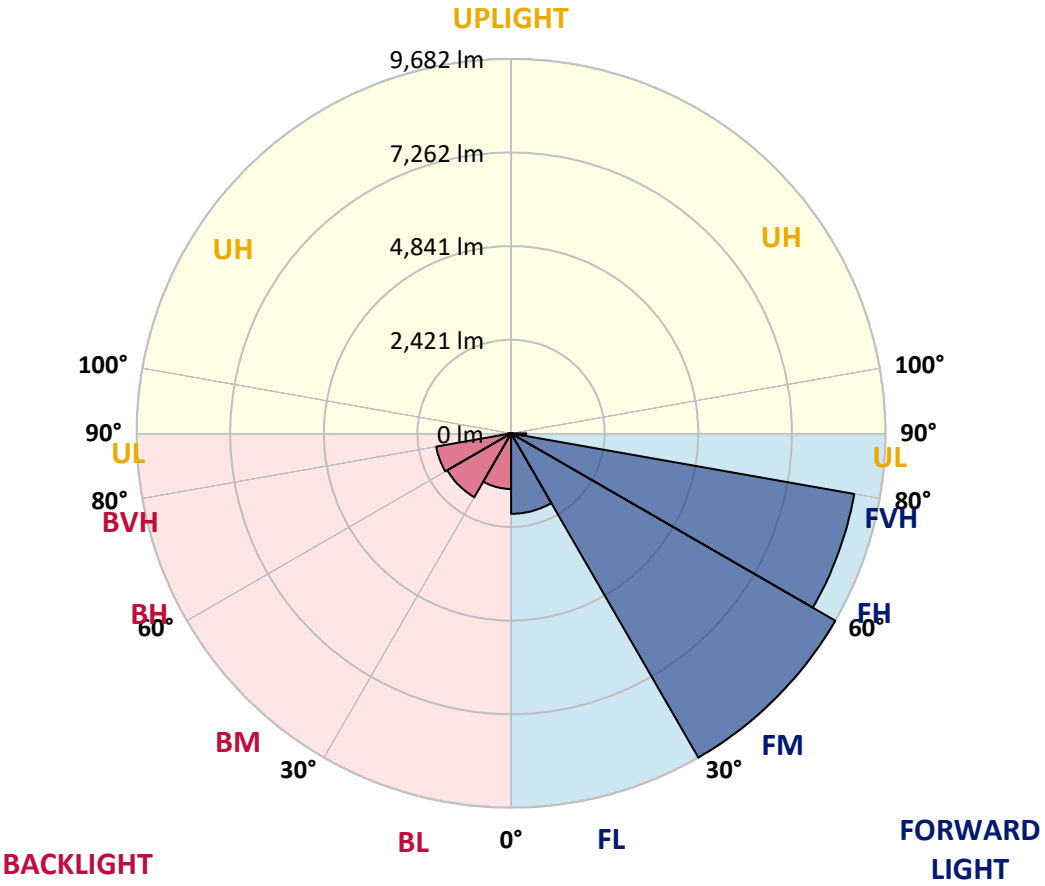
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2081.2	7.8			
FM	(30°-60°)	9682.4	36.5			
FH	(60°-80°)	9012.8	33.9			G4/12000
FVH	(80°-90°)	394.7	1.5			G3/500
BL	(0°-30°)	1439.9	5.4	B3/2500		
BM	(30°-60°)	1904.7	7.2	B2/2500		
BH	(60°-80°)	1965.2	7.4	B3/2500		G3/2500
BVH	(80°-90°)	80.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
Type II Short



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Scaled Data Report

REPORT NUMBER: P638967
CATALOG NUMBER: GWS-SA4F-830-U-SL2-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5869.2	5869.2	5869.2	5869.2	5869.2	5869.2	5869.2	5869.2	*5869.2*	5869.2	5869.2
2.5°	5497.2	5516.5	5504.9	5578.5	5582.4	5675.4	5727.7	5772.3	*5776.2*	5834.3	5873.1
5°	5121.2	5132.9	5132.9	5202.6	5249.1	5373.1	5493.3	5621.2	*5630.9*	5770.4	5876.9
7.5°	4817.0	4828.7	4820.9	4913.9	4974.0	5111.6	5264.6	5460.3	*5479.7*	5704.5	5890.5
10°	4578.7	4574.8	4594.2	4679.5	4757.0	4921.7	5092.2	5315.0	*5344.1*	5628.9	5906.0
12.5°	4415.9	4419.8	4431.4	4520.6	4603.9	4766.7	4943.0	5185.2	*5216.2*	5541.7	5898.2
15°	4338.4	4330.7	4340.4	4421.7	4501.2	4644.6	4826.7	5076.7	*5107.7*	5464.2	5900.2
17.5°	4321.0	4315.2	4313.2	4371.4	4431.4	4565.1	4739.5	4993.4	*5026.3*	5413.8	5911.8
20°	4375.2	4367.5	4346.2	4371.4	4396.6	4508.9	4677.5	4933.3	*4970.1*	5380.9	5935.1
22.5°	4524.4	4510.9	4477.9	4446.9	4414.0	4481.8	4638.8	4888.7	*4925.5*	5359.6	5958.3
25°	4751.2	4739.5	4704.6	4634.9	4514.8	4503.1	4631.0	4869.3	*4906.2*	5344.1	5968.0
27.5°	5063.1	5045.7	5010.8	4910.0	4714.3	4582.6	4660.1	4867.4	*4902.3*	5326.6	5958.3
30°	5433.2	5421.6	5402.2	5280.1	5018.5	4751.2	4726.0	4882.9	*4910.0*	5316.9	5938.9
32.5°	5809.1	5797.5	5813.0	5754.9	5433.2	5030.2	4869.3	4925.5	*4944.9*	5315.0	5921.5
35°	6140.5	6154.0	6266.4	6276.1	5960.3	5408.0	5096.1	5024.4	*5028.2*	5353.8	5929.3
37.5°	6487.3	6539.6	6686.9	6812.8	6549.3	5907.9	5433.2	5210.4	*5206.5*	5452.6	5977.7
40°	6946.5	6969.8	7157.7	7394.1	7229.4	6593.9	5911.8	5514.6	*5487.5*	5654.1	6107.5
42.5°	7394.1	7450.3	7750.7	8021.9	7967.7	7367.0	6514.4	5969.9	*5921.5*	6010.6	6374.9
45°	7963.8	8018.1	8355.2	8704.0	8802.8	8240.9	7285.6	6617.1	*6568.7*	6547.4	6865.1
47.5°	8533.5	8589.7	8891.9	9395.7	9742.6	9333.7	8289.3	7471.6	*7392.2*	7308.9	7605.3
50°	8917.1	8983.0	9271.7	9876.3	10690.1	10697.8	9479.0	8591.6	*8490.8*	8359.1	8647.8
52.5°	8903.6	8946.2	9221.3	9918.9	11372.1	12265.4	11071.8	10017.7	*9936.3*	9649.6	9901.5
55°	8204.1	8268.0	8545.1	9417.0	11445.8	13751.6	13412.5	11699.6	*11554.3*	11040.8	11317.9
57.5°	6799.3	6853.5	7132.5	8207.9	10792.8	14513.1	16384.9	13842.7	*13643.1*	12556.1	12875.8
60°	5132.9	5067.0	5198.8	6140.5	9231.0	14532.5	19008.5	16749.2	*16415.9*	14175.9	14443.3
62.5°	3852.1	3786.2	3815.3	4080.7	6258.7	13358.3	20504.4	20725.2	*20175.0*	16005.1	15952.8
65°	3044.1	3007.3	3090.6	3272.7	3648.6	10172.7	20516.0	25024.9	*24678.1*	18124.9	17501.0
67.5°	*2480.2*	*2457.0*	*2542.2*	*2879.4*	*2958.8*	*5466.1*	*18396.2*	*27032.3*	*27168.0*	*20446.2*	*18936.8*
70°	1997.7	1962.9	2096.6	2540.3	2751.5	3307.6	13178.0	26009.3	*26228.2*	21829.7	18531.8
72.5°	1379.6	1381.6	1449.4	2057.8	2656.5	2856.1	7454.2	21657.3	*22132.0*	20576.0	16291.9
75°	930.1	937.8	957.2	1358.3	2447.3	2770.9	3972.2	16396.5	*16731.7*	17006.9	13466.8
77.5°	561.9	565.8	610.4	821.6	1687.7	2586.8	2691.4	11885.6	*12149.2*	11211.3	8347.5
80°	325.5	339.1	379.8	550.3	1139.3	1943.5	2083.0	7287.6	*7586.0*	4983.7	2652.7
82.5°	143.4	153.1	207.3	319.7	664.6	1652.8	1625.7	2879.4	*2836.7*	1389.3	920.4
85°	25.2	31.0	44.6	100.8	244.1	871.9	1261.4	1271.1	*1195.5*	527.0	381.7
87.5°	0.0	0.0	0.0	0.0	0.0	5.8	189.9	341.0	*339.1*	149.2	131.8
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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CATALOG NUMBER: GWS-SA4F-830-U-SL2-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5869.2	5869.2	5869.2	5869.2	5869.2	5869.2	5869.2	5869.2	5869.2	5869.2	5869.2
2.5°	5898.2	5845.9	5892.4	5898.2	5888.6	5880.8	5822.7	5772.3	5766.5	5712.2	5712.2
5°	5919.6	5871.1	5894.4	5849.8	5780.1	5708.4	5584.3	5499.1	5460.3	5390.6	5390.6
7.5°	5948.6	5898.2	5871.1	5760.7	5597.9	5441.0	5241.4	5074.7	5006.9	4908.1	4904.2
10°	5975.8	5911.8	5818.8	5603.7	5344.1	5094.1	4803.5	4567.1	4406.2	4288.0	4288.0
12.5°	5973.8	5890.5	5706.4	5388.6	5030.2	4667.8	4280.3	3923.8	3710.6	3526.5	3514.9
15°	5969.9	5855.6	5563.0	5138.7	4664.0	4162.1	3635.1	3170.0	2854.2	2674.0	2658.5
17.5°	5966.1	5811.1	5402.2	4853.8	4218.3	3534.3	2838.7	2334.9	2071.4	1960.9	1964.8
20°	5966.1	5760.7	5229.8	4526.4	3704.8	2782.5	2083.0	1716.8	1650.9	1656.7	1662.5
22.5°	5948.6	5698.7	5037.9	4169.9	3133.2	2046.2	1536.6	1412.6	1447.4	1501.7	1509.4
25°	5907.9	5596.0	4815.1	3774.6	2453.1	1490.1	1253.7	1230.4	1294.4	1362.2	1381.6
27.5°	5844.0	5477.8	4565.1	3311.5	1805.9	1197.5	1102.5	1100.6	1151.0	1201.4	1218.8
30°	5776.2	5346.0	4301.6	2796.0	1307.9	1042.5	1005.6	1005.6	1030.8	1061.8	1058.0
32.5°	5696.7	5212.3	4018.7	2259.3	1065.7	955.3	943.6	937.8	941.7	953.3	953.3
35°	5628.9	5094.1	3728.1	1691.6	955.3	906.8	895.2	881.6	875.8	868.1	871.9
37.5°	5603.7	5001.1	3427.7	1275.0	901.0	871.9	852.6	833.2	819.6	815.8	813.8
40°	5644.4	4962.4	3127.4	1050.2	862.3	835.1	813.8	788.6	777.0	777.0	777.0
42.5°	5803.3	4991.4	2821.2	949.5	835.1	804.1	773.1	749.9	746.0	749.9	751.8
45°	6094.0	5103.8	2503.5	899.1	811.9	773.1	736.3	718.9	718.9	722.7	722.7
47.5°	6613.2	5398.3	2189.6	868.1	788.6	747.9	709.2	691.7	689.8	693.7	693.7
50°	7512.3	5929.3	1906.7	846.8	771.2	728.6	689.8	666.6	660.7	658.8	658.8
52.5°	8645.9	6849.6	1726.5	831.3	749.9	707.2	668.5	637.5	625.9	620.1	620.1
55°	10015.8	8076.2	1726.5	819.6	722.7	682.1	637.5	606.5	589.0	581.3	581.3
57.5°	11567.9	9504.2	2024.9	809.9	701.4	653.0	604.6	573.5	554.2	542.5	542.5
60°	13147.0	11013.7	2763.1	796.4	682.1	616.2	567.7	538.7	513.5	499.9	498.0
62.5°	14784.4	12676.2	3735.8	804.1	668.5	581.3	529.0	496.0	474.7	461.2	459.2
65°	16284.1	14259.3	4586.4	864.2	670.4	550.3	484.4	455.4	437.9	420.5	418.5
67.5°	*17557.2*	*15133.2*	*3989.6*	*986.3*	*711.1*	*513.5*	*439.8*	*410.8*	*395.3*	*383.7*	*381.7*
70°	16665.8	13800.0	2263.2	1061.8	767.3	474.7	389.5	370.1	354.6	346.8	344.9
72.5°	14251.5	11684.1	1513.3	937.8	699.5	424.3	343.0	327.5	315.8	306.2	304.2
75°	11544.6	9265.9	1156.8	769.3	544.5	344.9	294.5	282.9	271.3	261.6	259.6
77.5°	6830.3	5353.8	852.6	608.4	383.7	269.3	244.1	234.5	222.8	215.1	213.1
80°	2179.9	1860.2	540.6	418.5	253.8	207.3	188.0	180.2	168.6	158.9	157.0
82.5°	831.3	718.9	286.8	213.1	168.6	141.4	125.9	118.2	110.4	100.8	98.8
85°	368.2	344.9	158.9	114.3	91.1	69.8	62.0	58.1	48.4	40.7	38.8
87.5°	129.8	129.8	67.8	32.9	19.4	9.7	5.8	1.9	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

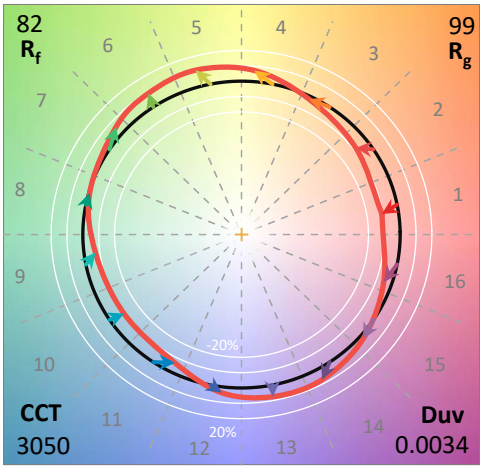
Test Information

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

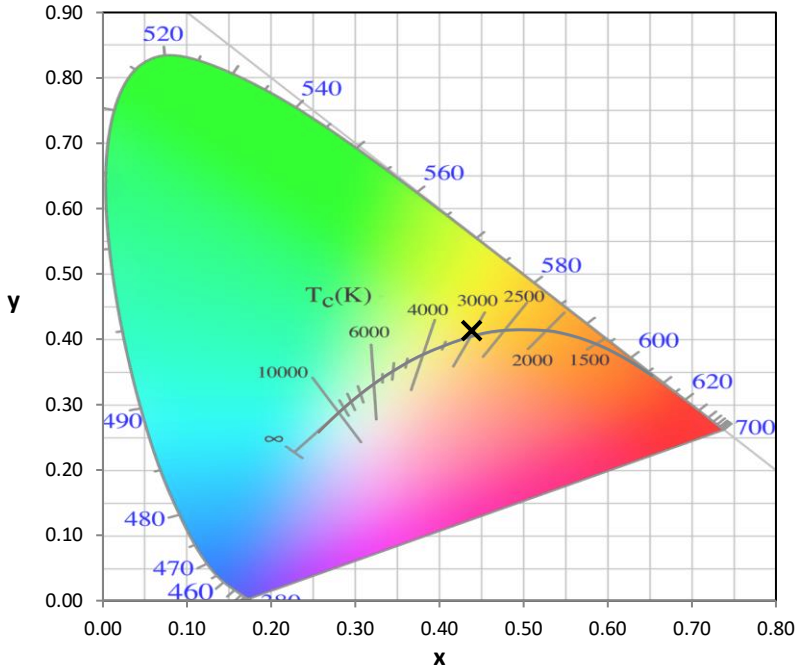
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

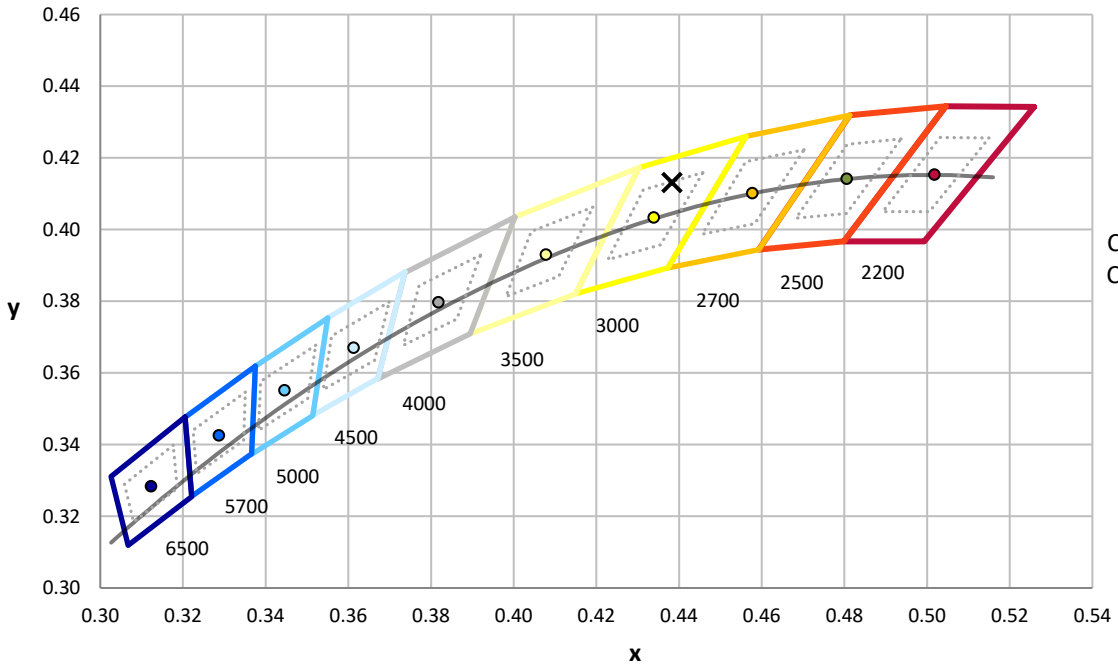
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

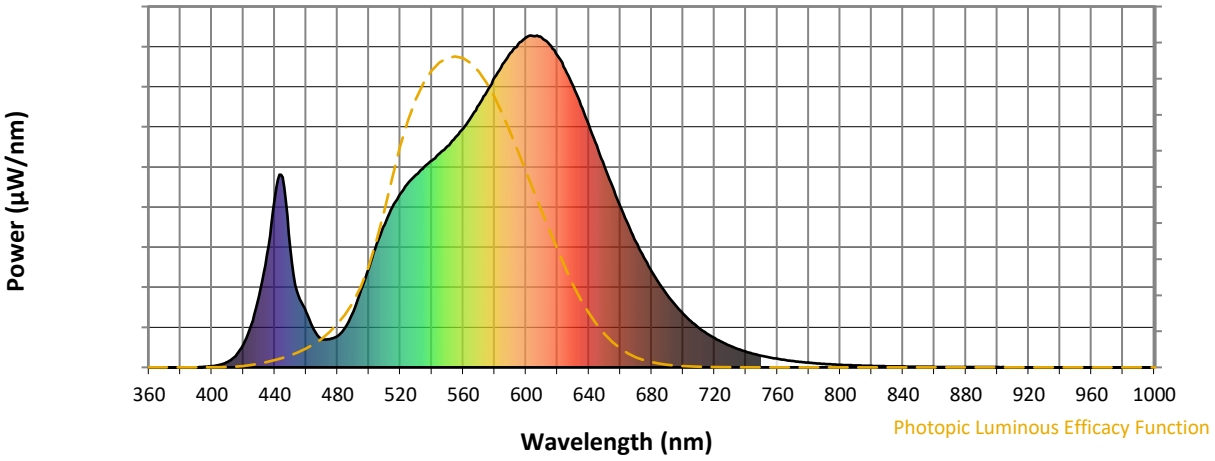


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

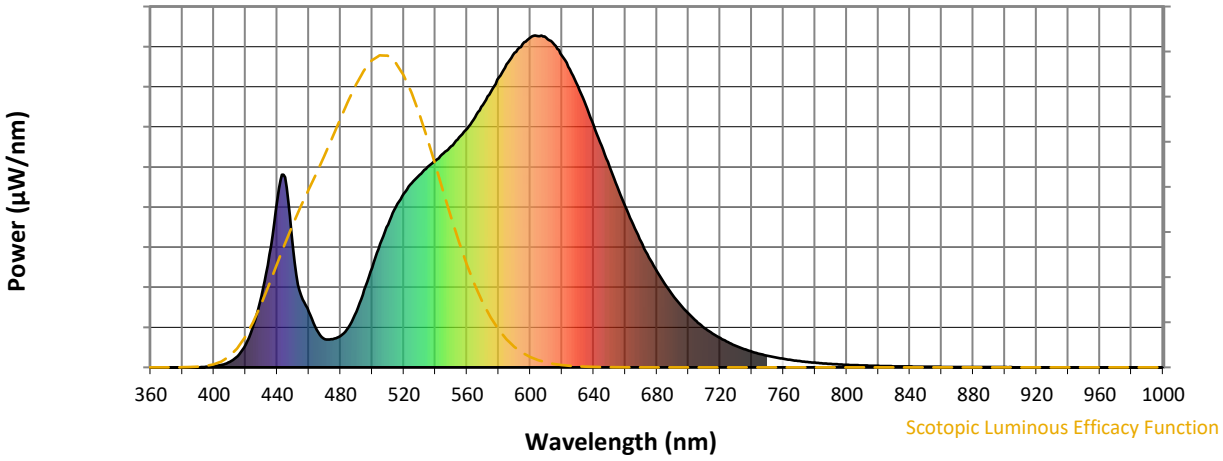


Photopic Lumens: NR

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

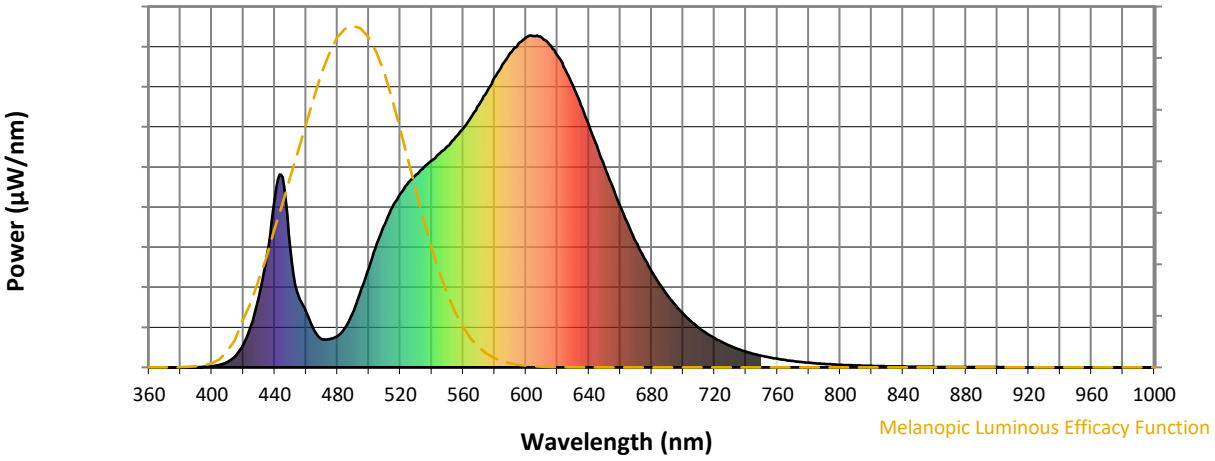


Scotopic Lumens: NR **S/P: 1.27**

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			

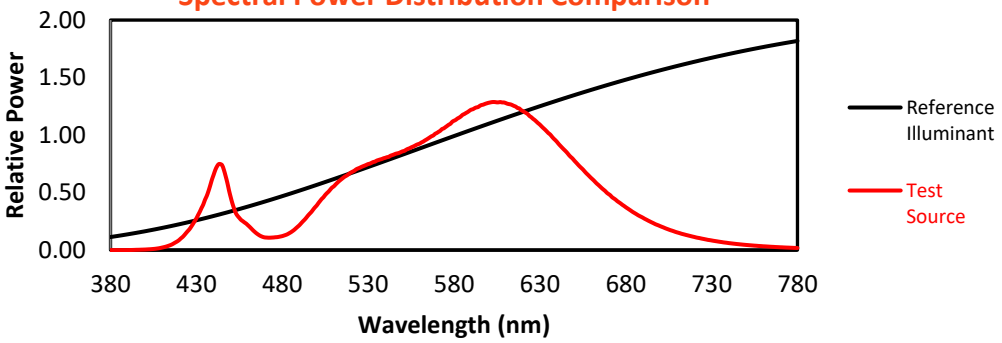
REPORT NUMBER: SP1-2408-195-9

TM-30-18

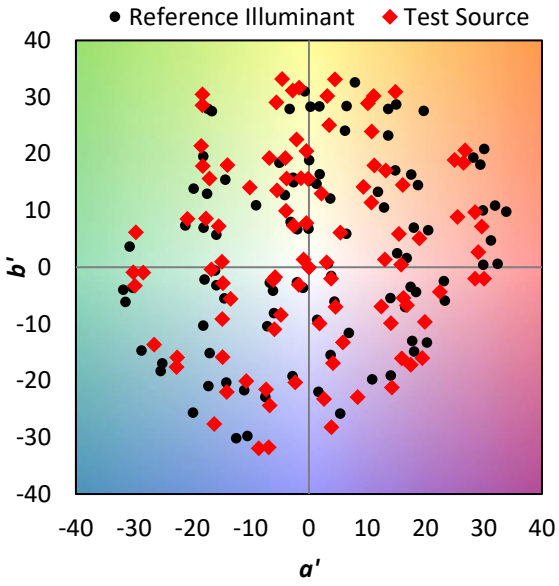
Summary

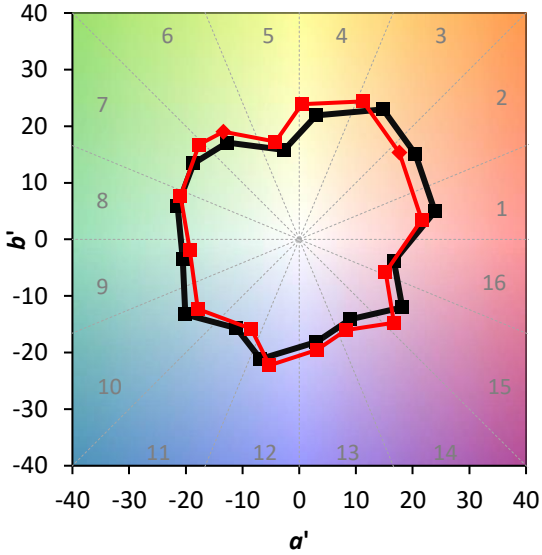
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

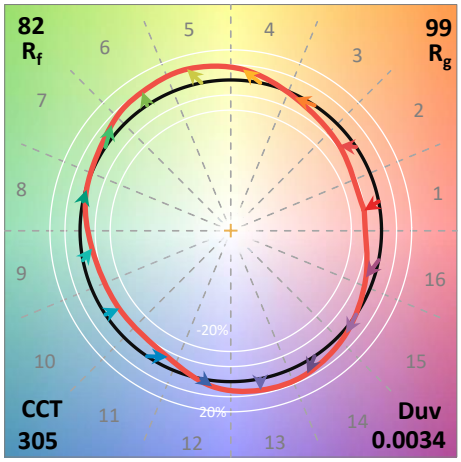
Spectral Power Distribution Comparison

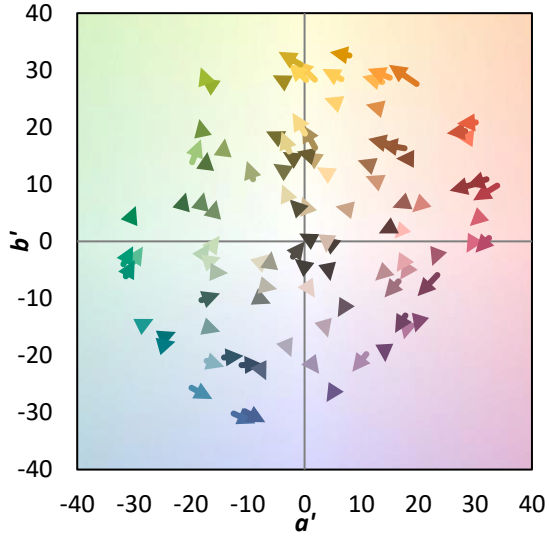


Color Vector Graphics







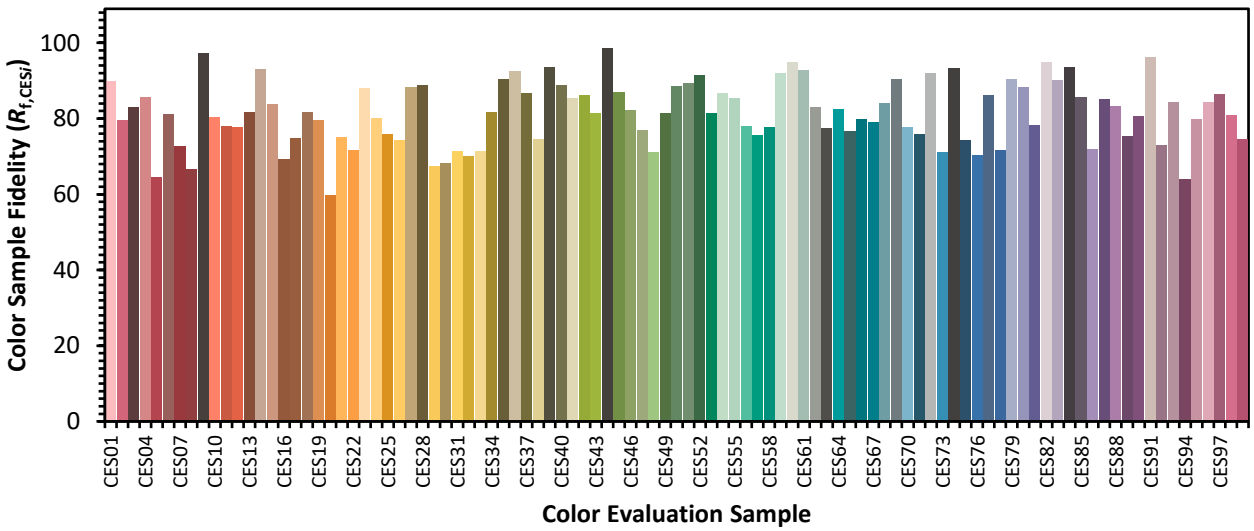


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

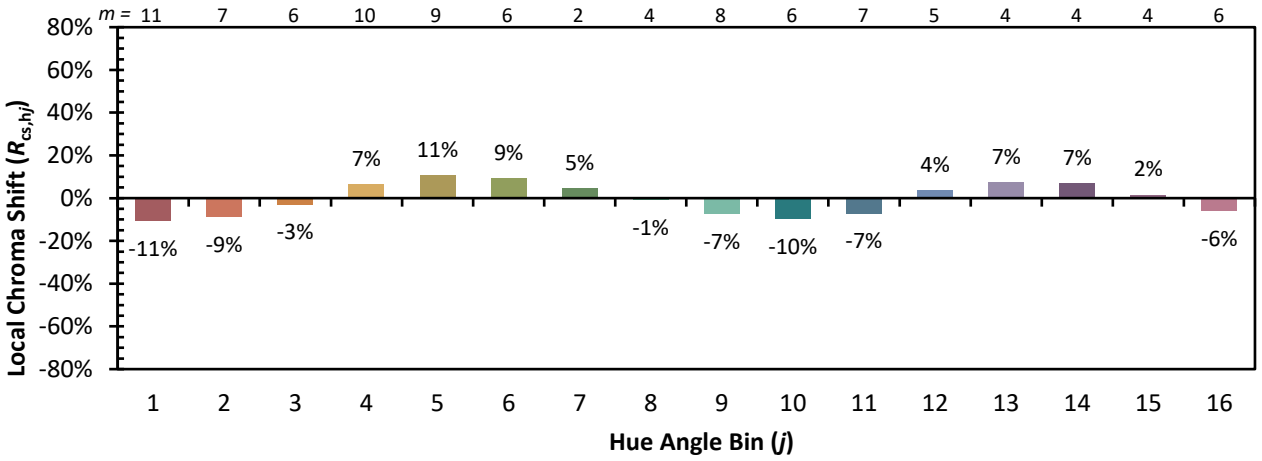
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

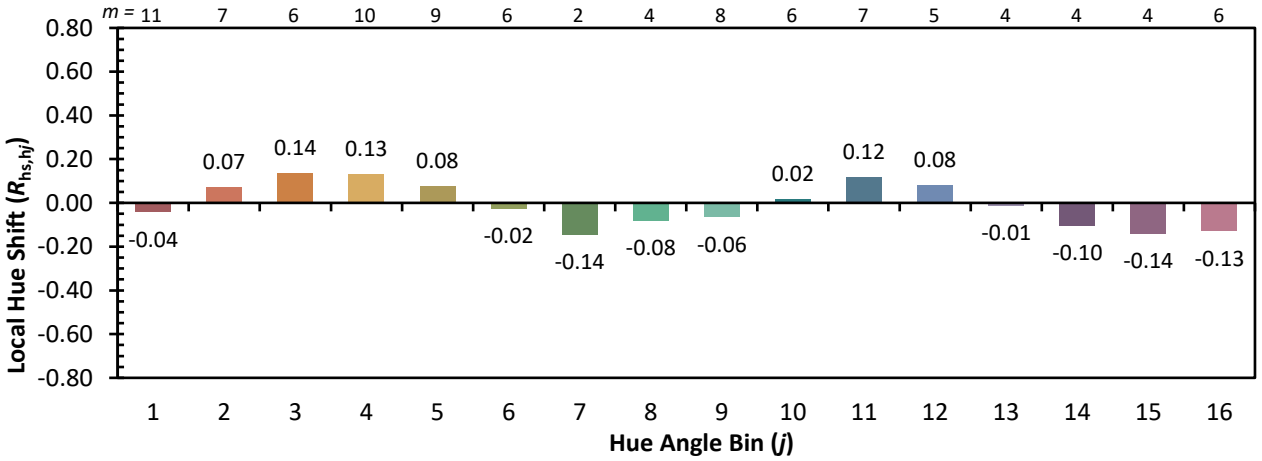


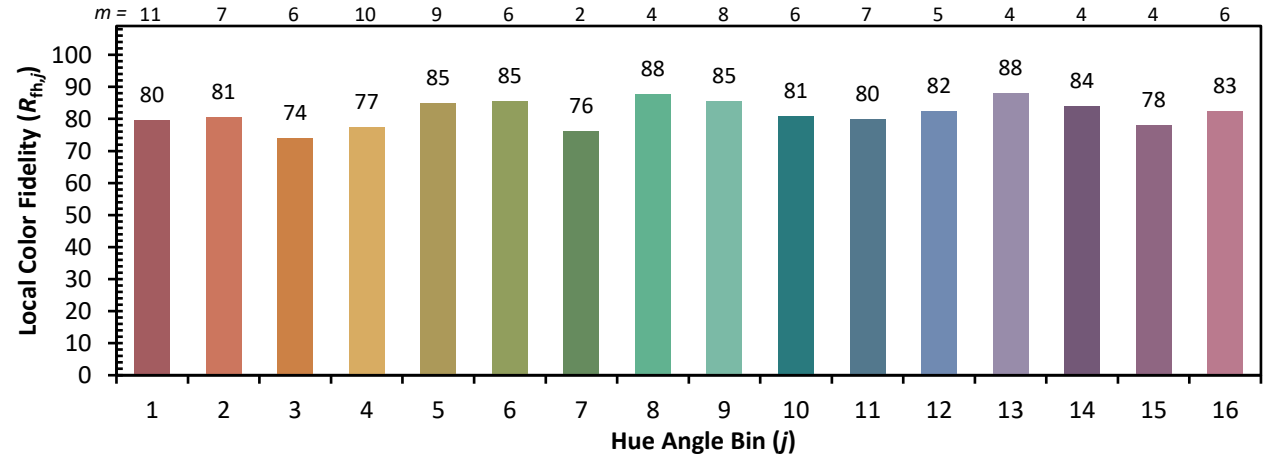
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



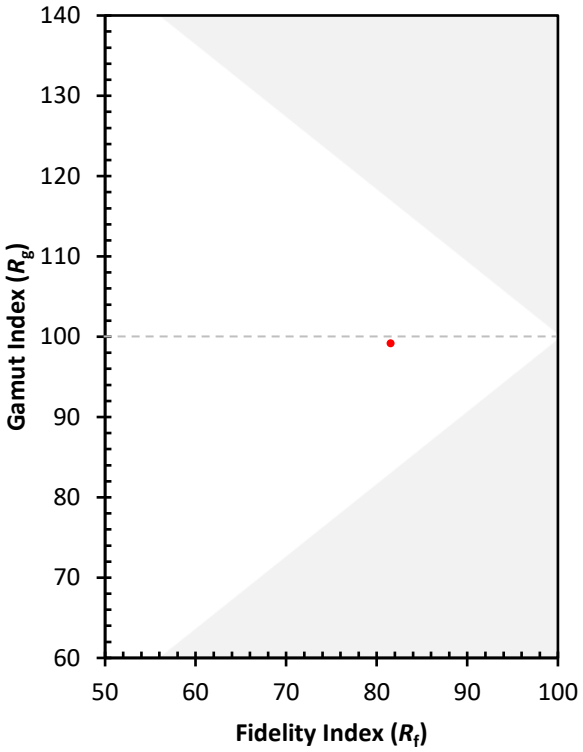


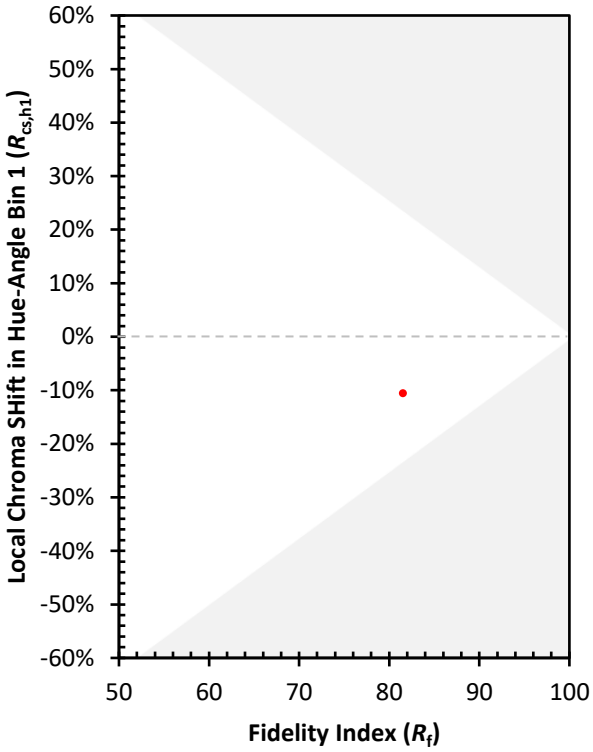


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





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