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: P638973

Luminaire Tested: GWS-SA4F-830-U-SL4-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:	P638973
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-35)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-SL4-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	25958.2 lumens
Efficiency:	N/A
Efficacy:	115.2 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type IV - 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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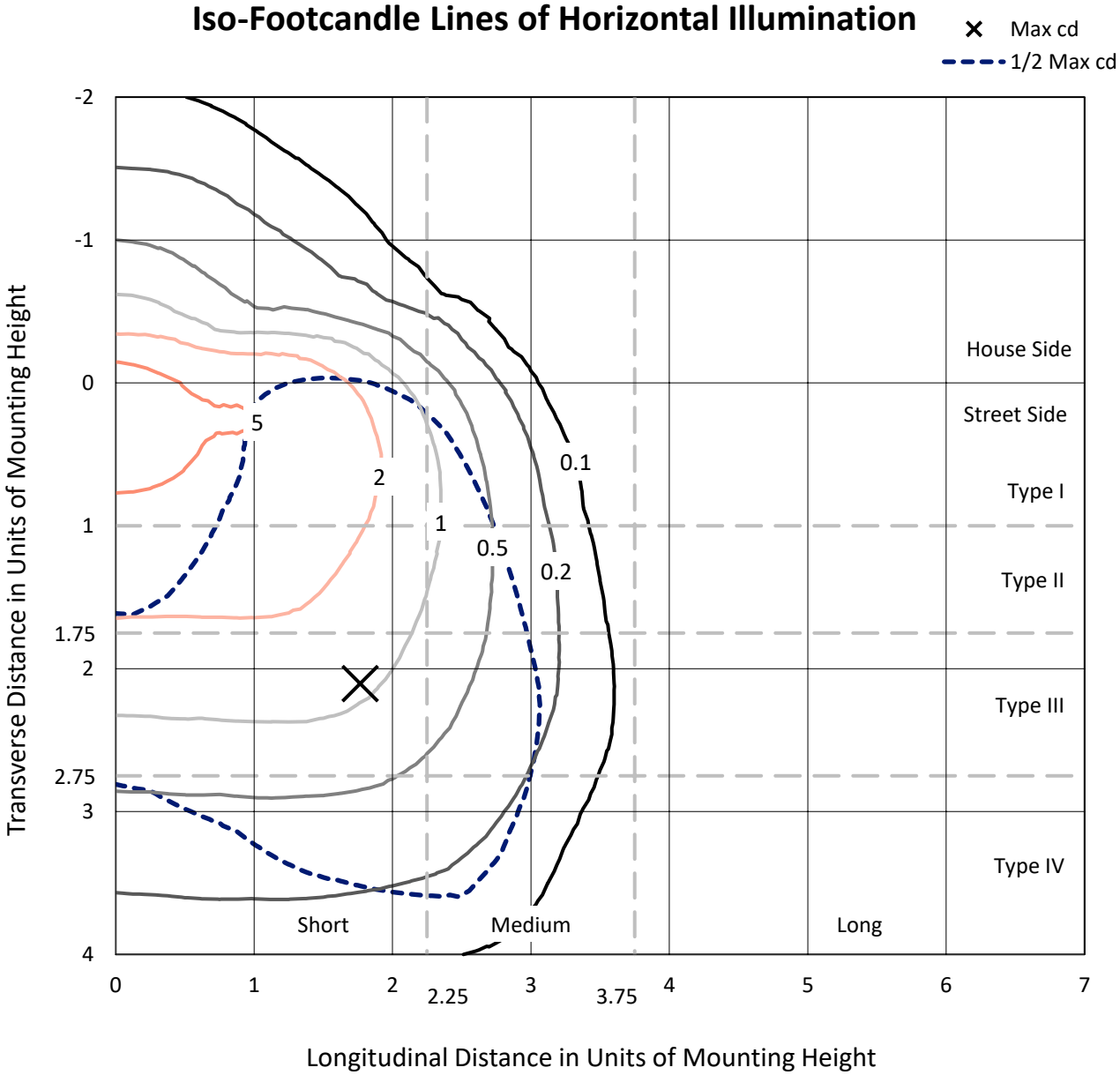
REPORT NUMBER: P638973
CATALOG NUMBER: GWS-SA4F-830-U-SL4-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
Type IV - Short - N/A

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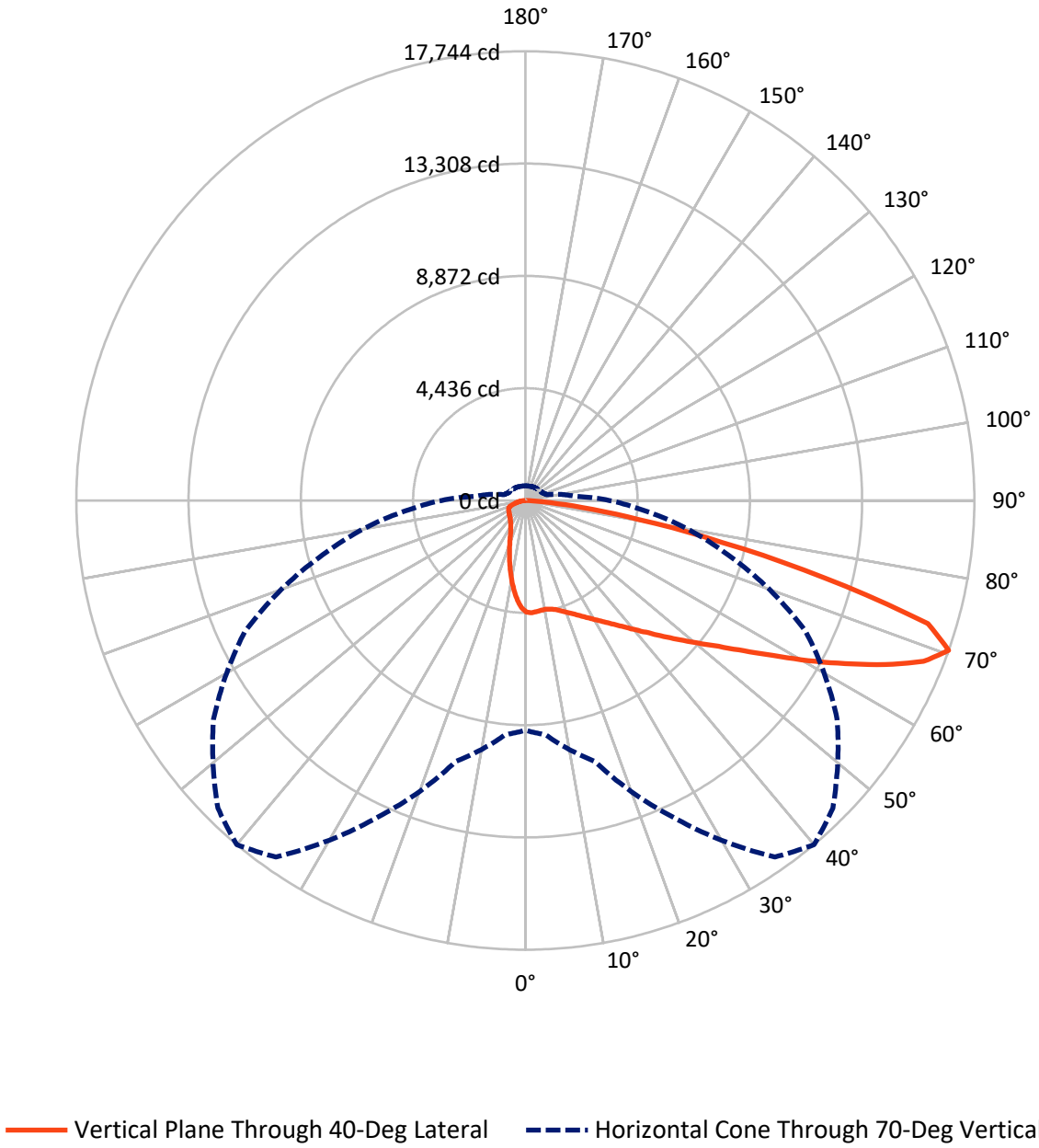
Luminous Intensity Polar Plot



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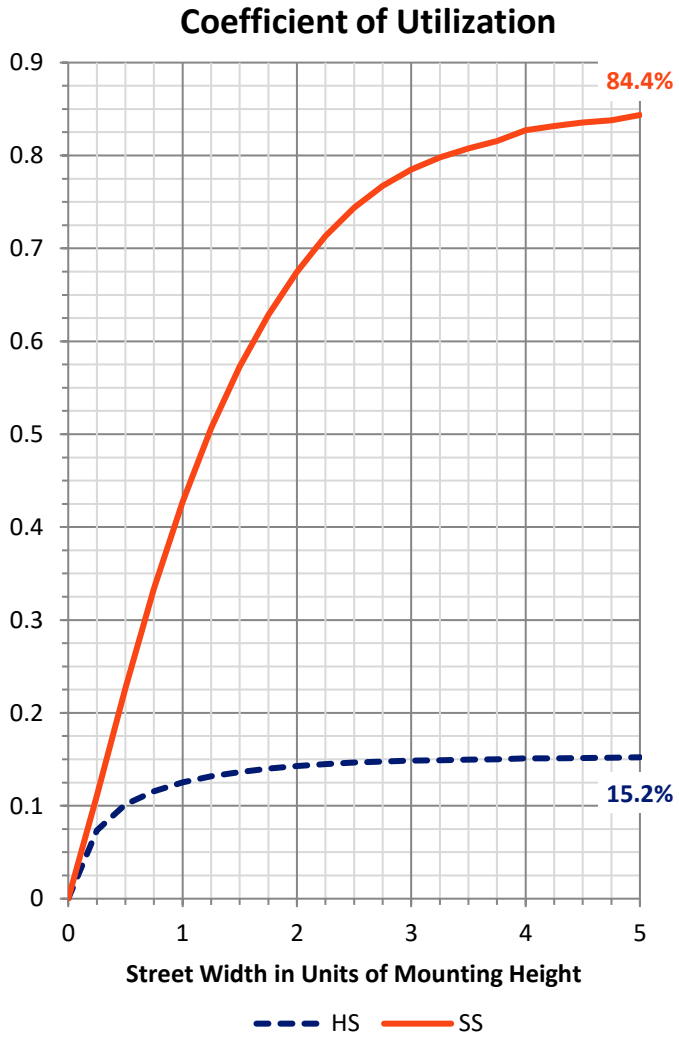
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3998.2	0.0	3998.2
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	21960.0	0.0	21960.0
	% Fixture	84.6	0.0	84.6
Total	Lumens	25958.2	0.0	25958.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	389.4	1.5
10°-20°	1015.0	3.9
20°-30°	1593.8	6.1
30°-40°	2396.3	9.2
40°-50°	3698.7	14.2
50°-60°	5492.9	21.2
60°-70°	6923.7	26.7
70°-80°	4003.9	15.4
80°-90°	444.4	1.7
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°	25958.2	100.0
0°-180°	25958.2	100.0



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REPORT NUMBER: P638973
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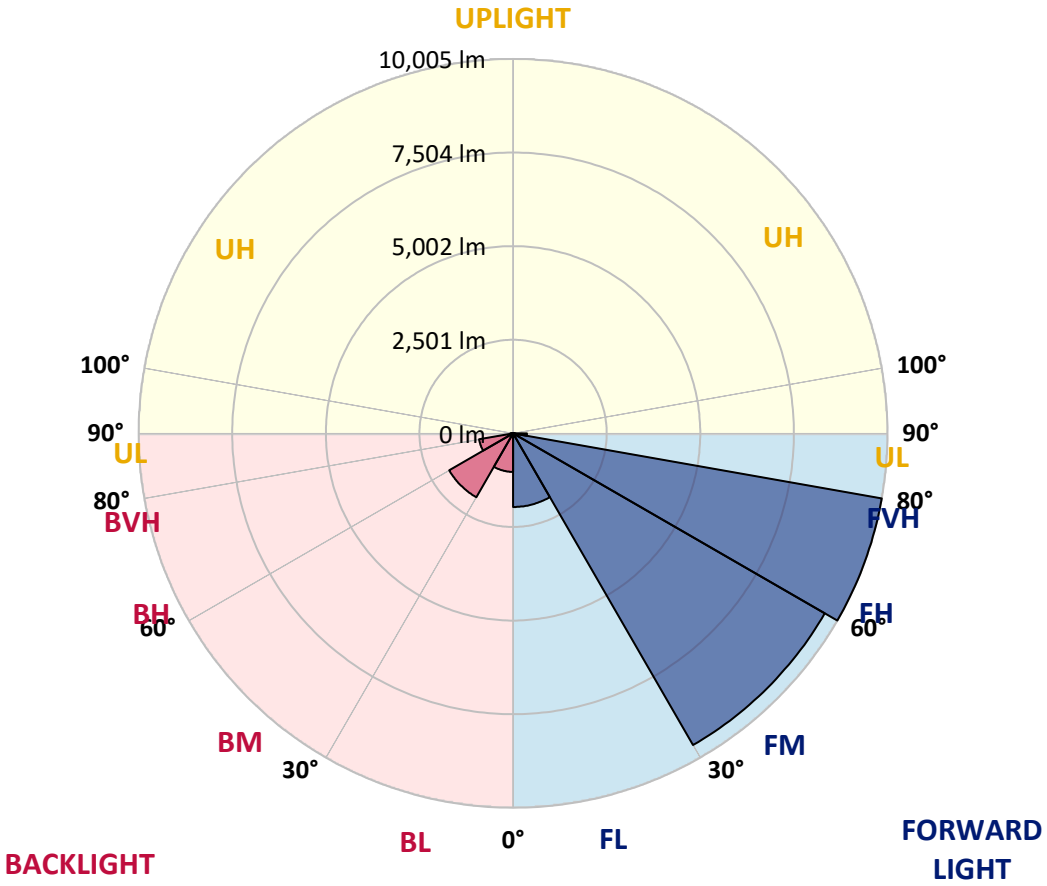
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1967.8	7.6			
FM	(30°-60°)	9617.2	37.0			
FH	(60°-80°)	10004.9	38.5			G4/12000
FVH	(80°-90°)	370.1	1.4			G3/500
BL	(0°-30°)	1030.4	4.0	B3/2500		
BM	(30°-60°)	1970.8	7.6	B2/2500		
BH	(60°-80°)	922.8	3.6	B2/1000		G2/1000
BVH	(80°-90°)	74.3	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 IV Short



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Scaled Data Report

REPORT NUMBER: P638973
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	4408.0	4408.0	4408.0	4408.0	4408.0	*4408.0*	4408.0	4408.0	4408.0	4408.0	4408.0
2.5°	4435.1	4442.9	4448.7	4456.4	4452.6	*4440.9*	4450.6	4450.6	4429.3	4406.1	4384.7
5°	4440.9	4450.6	4448.7	4446.8	4431.3	*4411.9*	4411.9	4400.2	4363.4	4326.6	4291.7
7.5°	4429.3	4427.4	4425.4	4419.6	4402.2	*4380.9*	4377.0	4353.7	4305.3	4254.9	4204.6
10°	4377.0	4375.1	4380.9	4394.4	4390.6	*4371.2*	4371.2	4349.9	4293.7	4231.7	4165.8
12.5°	4334.4	4334.4	4357.6	4394.4	4408.0	*4400.2*	4402.2	4386.7	4322.7	4249.1	4171.6
15°	4340.2	4342.1	4392.5	4452.6	4477.8	*4471.9*	4473.9	4456.4	4384.7	4311.1	4206.5
17.5°	4378.9	4388.6	4475.8	4559.1	4592.1	*4584.3*	4570.8	4541.7	4460.3	4377.0	4249.1
20°	4460.3	4475.8	4588.2	4692.8	4731.6	*4714.1*	4690.9	4632.8	4543.6	4452.6	4295.6
22.5°	4621.1	4630.8	4754.8	4857.5	4888.5	*4867.2*	4820.7	4737.4	4634.7	4539.8	4351.8
25°	4847.8	4859.5	4977.6	5072.6	5064.8	*5039.7*	4975.7	4873.0	4751.0	4650.2	4433.2
27.5°	5117.2	5136.5	5252.8	5328.4	5278.0	*5241.2*	5169.5	5045.5	4907.9	4816.8	4557.2
30°	5411.7	5419.4	5518.2	5593.8	5516.3	*5465.9*	5378.7	5245.0	5121.0	5053.2	4743.2
32.5°	5696.5	5704.2	5789.5	5832.1	5750.7	*5713.9*	5638.4	5496.9	5409.7	5372.9	5020.3
35°	5996.8	5994.9	6064.6	6101.4	6018.1	*6002.6*	5925.1	5816.6	5801.1	5849.6	5425.2
37.5°	6297.1	6279.7	6316.5	6365.0	6318.5	*6334.0*	6283.6	6246.8	6306.8	6432.8	5963.9
40°	6537.4	6537.4	6576.2	6636.2	6651.7	*6719.5*	6690.5	6738.9	6932.7	7233.0	6630.4
42.5°	6750.5	6752.5	6833.9	6926.9	7039.2	*7143.9*	7167.1	7293.1	7694.1	8165.0	7467.4
45°	6973.4	6975.3	7085.7	7221.4	7459.7	*7659.3*	7705.8	7988.7	8562.2	9135.7	8376.2
47.5°	7231.1	7209.7	7362.8	7589.5	7928.6	*8215.3*	8335.5	8736.6	9461.2	10166.5	9232.6
50°	7521.7	7477.1	7647.6	8039.0	8457.5	*8850.9*	9052.4	9511.6	10426.1	11117.8	10038.6
52.5°	7849.1	7824.0	8002.2	8478.9	9118.3	*9571.7*	9844.9	10447.4	11363.9	12065.3	10678.0
55°	8256.0	8196.0	8453.7	9060.1	9893.3	*10470.7*	10794.3	11373.6	12388.9	12925.6	11166.3
57.5°	8701.7	8635.8	8980.7	9786.7	10900.8	*11534.4*	11939.4	12416.0	13353.8	13584.4	11453.0
60°	9182.2	9160.9	9569.7	10639.3	12102.1	*12838.4*	13131.0	13563.1	14192.8	13966.1	11381.4
62.5°	9622.0	9614.3	10209.1	11563.5	13375.1	*14185.0*	14417.6	14531.9	14797.3	13940.9	10811.7
65°	10085.1	10151.0	10955.1	12635.0	14834.1	*15628.5*	15725.4	15434.8	15000.8	13280.2	9645.3
67.5°	10143.2	10271.1	11424.0	13638.6	16217.6	*16967.4*	16889.9	15777.7	14400.1	11441.4	7560.4
70°	*9071.8*	*9294.6*	*10676.1*	*13791.7*	*17192.2*	*17744.4*	*17184.4*	*15039.5*	*12220.3*	*8289.0*	*4754.8*
72.5°	7579.8	7771.6	8992.3	11761.1	15934.7	*16638.0*	15880.4	12729.9	8635.8	4754.8	2422.0
75°	5899.9	6122.8	7248.5	9348.8	11929.7	*12210.6*	11830.9	8878.0	4747.1	1960.8	1100.5
77.5°	3600.0	3760.8	4636.6	6334.0	8347.1	*7926.6*	6717.6	4977.6	2082.9	939.7	680.1
80°	1592.7	1691.5	2284.4	3402.4	4822.6	*4559.1*	3594.2	2125.5	1139.3	596.8	474.7
82.5°	854.5	918.4	1125.7	1346.6	2117.8	*2214.7*	1796.1	1224.6	612.3	341.0	271.3
85°	375.9	412.7	511.5	488.3	695.6	*684.0*	689.8	840.9	292.6	156.9	176.3
87.5°	0.0	0.0	0.0	0.0	1.9	*1.9*	21.3	112.4	29.1	46.5	40.7
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-SL4-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0
2.5°	4361.5	4326.6	4316.9	4305.3	4284.0	4247.2	4220.1	4189.1	4175.5	4160.0	4161.9
5°	4253.0	4210.4	4169.7	4117.4	4051.5	3977.9	3927.5	3869.4	3838.4	3809.3	3817.0
7.5°	4160.0	4094.1	4010.8	3900.4	3782.2	3650.4	3543.8	3460.5	3404.3	3365.6	3385.0
10°	4101.9	4024.4	3879.0	3698.8	3499.3	3297.8	3144.7	3001.3	2912.2	2842.4	2838.6
12.5°	4090.2	3989.5	3778.3	3516.7	3228.0	2958.7	2733.9	2540.2	2422.0	2334.8	2367.7
15°	4101.9	3974.0	3691.1	3348.1	2983.9	2619.6	2340.6	2117.8	1976.3	1896.9	1891.1
17.5°	4115.4	3958.5	3592.3	3166.0	2728.1	2311.5	1988.0	1751.6	1606.3	1526.8	1528.8
20°	4127.1	3935.2	3476.0	2966.4	2468.5	2024.8	1689.6	1464.8	1335.0	1276.9	1286.6
22.5°	4146.4	3912.0	3352.0	2753.3	2203.0	1747.7	1453.2	1271.1	1193.6	1154.8	1156.7
25°	4183.2	3898.4	3224.1	2520.8	1941.5	1526.8	1290.4	1168.4	1119.9	1096.7	1094.7
27.5°	4258.8	3910.0	3090.4	2296.0	1705.1	1358.2	1185.8	1106.4	1073.4	1057.9	1056.0
30°	4384.7	3956.5	2974.2	2067.4	1501.6	1226.5	1114.1	1065.7	1046.3	1032.7	1030.8
32.5°	4576.6	4043.7	2848.2	1854.3	1336.9	1129.6	1057.9	1032.7	1019.2	1011.4	1011.4
35°	4867.2	4202.6	2724.2	1668.3	1209.1	1054.0	1013.4	1003.7	992.0	988.2	992.0
37.5°	5285.7	4456.4	2611.9	1505.5	1118.0	995.9	964.9	968.8	959.1	964.9	970.7
40°	5816.6	4795.5	2516.9	1371.8	1050.2	953.3	922.3	935.9	930.0	935.9	945.5
42.5°	6489.0	5216.0	2445.2	1267.2	1001.7	918.4	889.4	902.9	899.0	906.8	916.5
45°	7238.8	5770.1	2412.3	1193.6	966.9	893.2	862.2	871.9	868.0	873.8	883.5
47.5°	7957.7	6273.9	2441.4	1150.9	937.8	871.9	839.0	842.8	840.9	839.0	844.8
50°	8577.7	6675.0	2524.7	1137.4	918.4	850.6	819.6	821.5	815.7	804.1	808.0
52.5°	9083.4	6996.6	2575.0	1137.4	908.7	827.3	798.3	800.2	788.6	773.1	775.0
55°	9416.7	7126.4	2534.4	1135.4	904.9	808.0	777.0	778.9	767.3	747.9	749.8
57.5°	9511.6	7000.5	2363.9	1114.1	901.0	792.5	755.7	759.5	751.8	730.5	730.5
60°	9246.1	6539.3	2051.9	1065.7	891.3	782.8	740.2	746.0	742.1	720.8	720.8
62.5°	8550.6	5719.7	1679.9	992.0	864.2	771.2	726.6	738.2	747.9	736.3	734.3
65°	7248.5	4582.4	1366.0	910.7	829.3	751.8	707.2	736.3	757.6	773.1	773.1
67.5°	5438.8	3280.3	1114.1	825.4	777.0	713.0	682.0	709.2	724.7	734.3	740.2
70°	*3315.2*	*1929.8*	*877.7*	*726.6*	*701.4*	*654.9*	*631.7*	*604.5*	*583.2*	*579.3*	*581.3*
72.5°	1621.8	1104.4	713.0	618.1	598.7	556.1	503.8	492.1	482.5	476.6	474.7
75°	893.2	769.2	589.0	513.5	478.6	426.3	414.6	395.3	391.4	383.6	385.6
77.5°	631.7	606.5	486.3	416.6	364.3	337.1	343.0	329.4	329.4	323.6	321.6
80°	474.7	476.6	374.0	304.2	269.3	259.6	265.4	265.4	261.6	259.6	257.7
82.5°	300.3	339.1	251.9	195.7	191.8	193.8	191.8	189.9	193.8	187.9	186.0
85°	207.3	244.1	153.1	116.3	116.3	114.3	118.2	116.3	120.1	114.3	114.3
87.5°	46.5	108.5	56.2	34.9	36.8	34.9	36.8	38.8	42.6	44.6	44.6
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

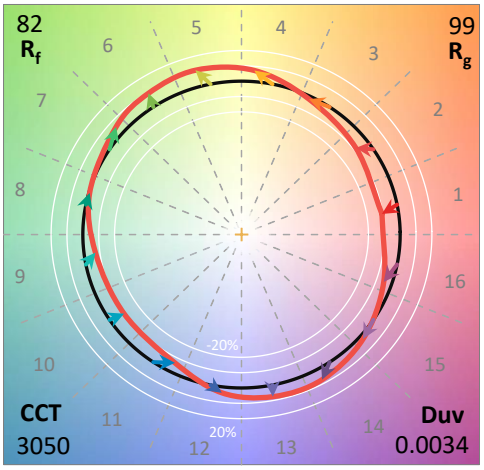
Test Information

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

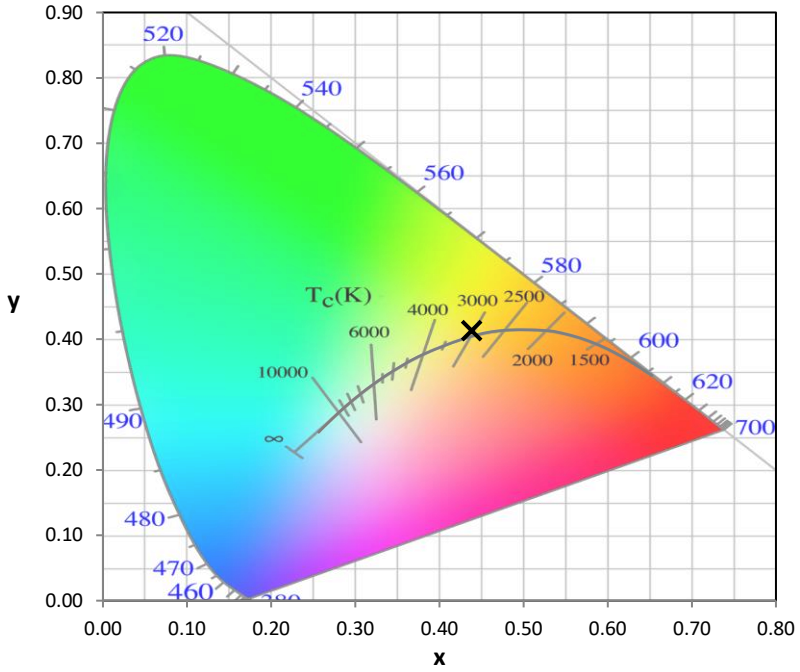
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

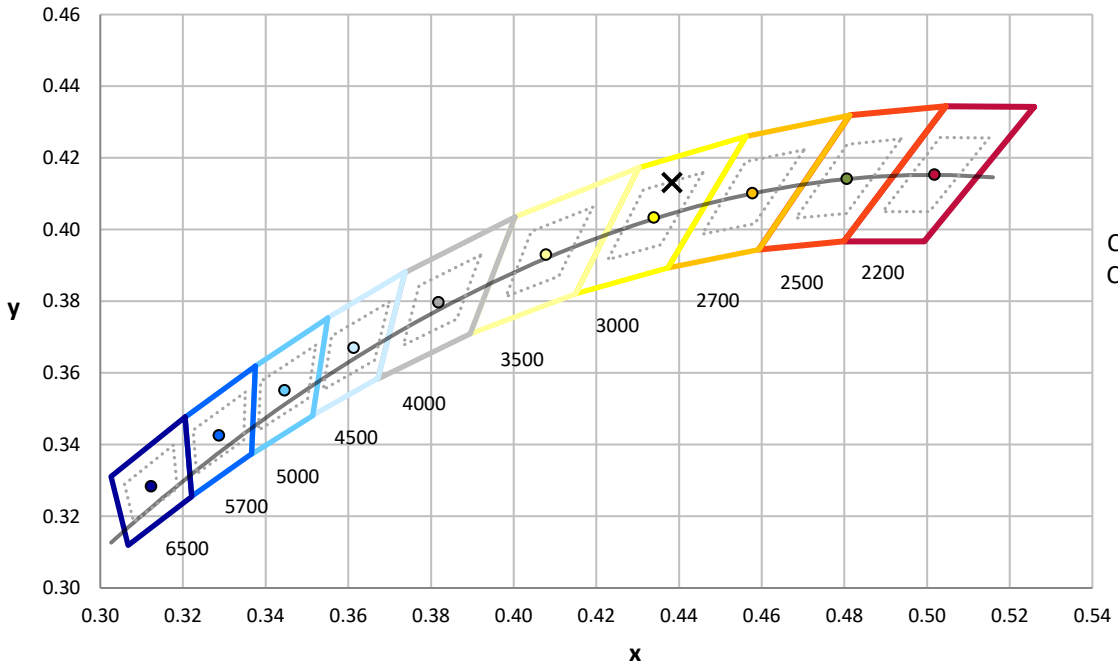
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

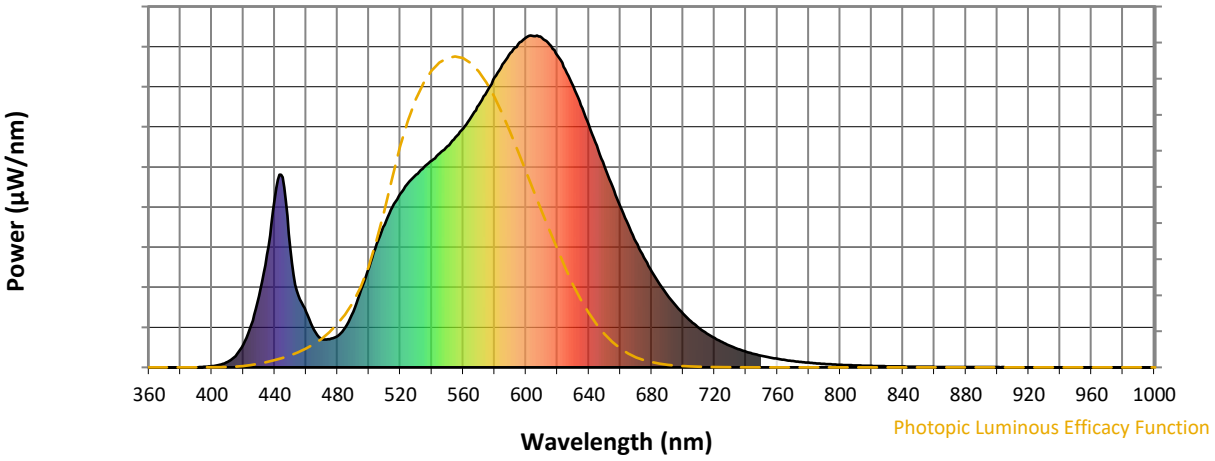


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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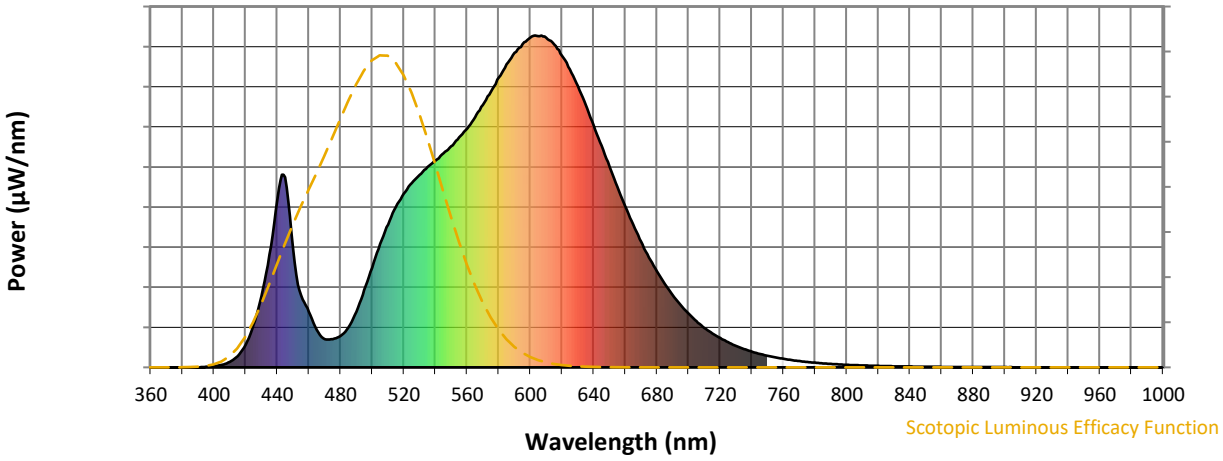
Scotopic Flux vs. Wavelength



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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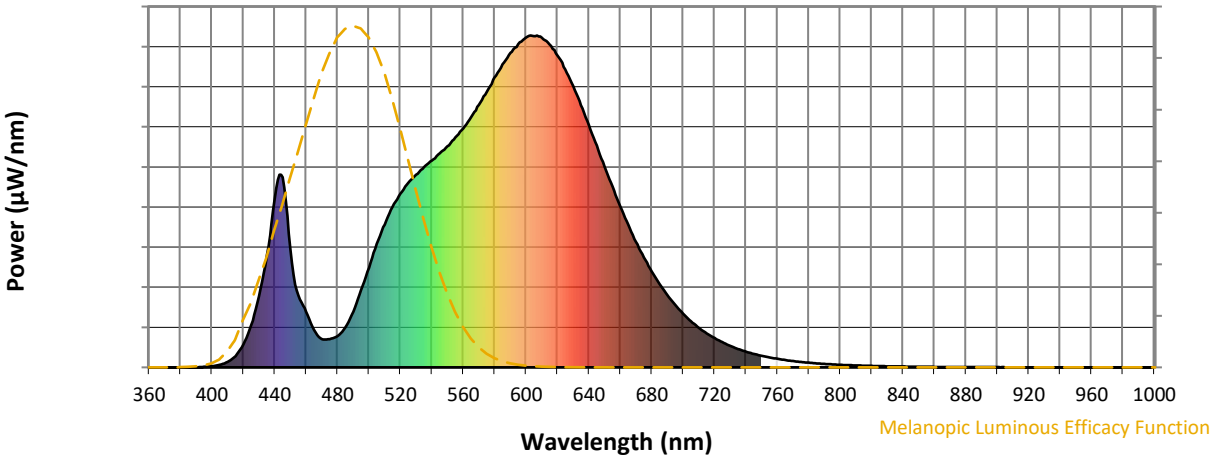
Melanopic Flux vs. Wavelength



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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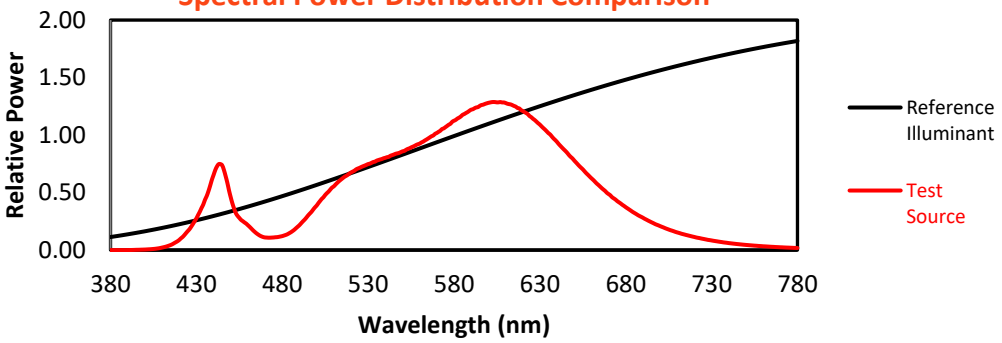
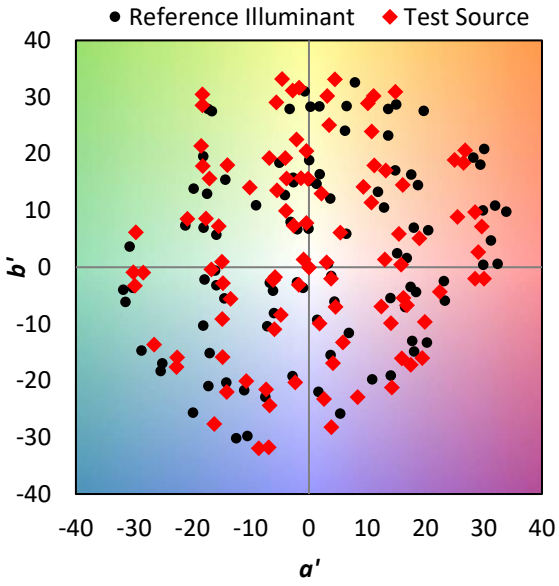
Summary

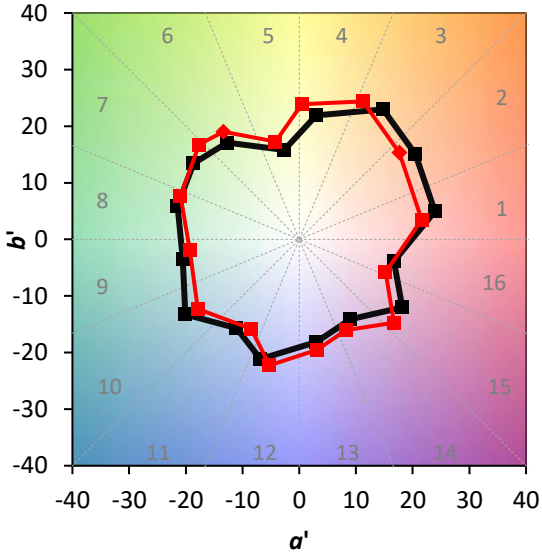
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

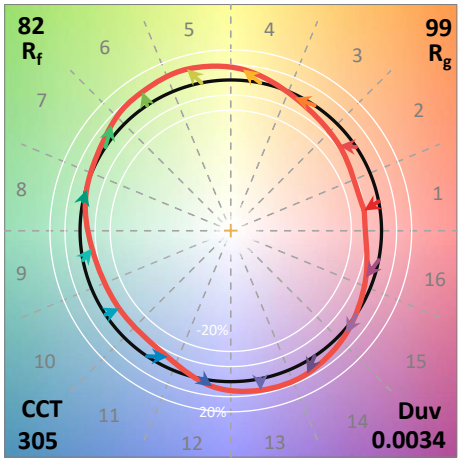
Spectral Power Distribution Comparison

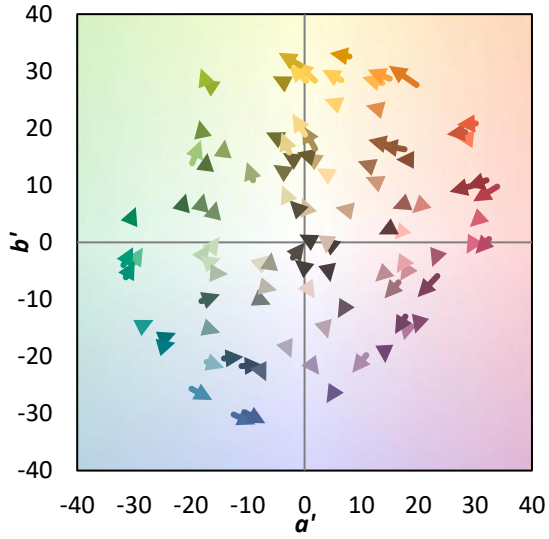


Color Vector Graphics









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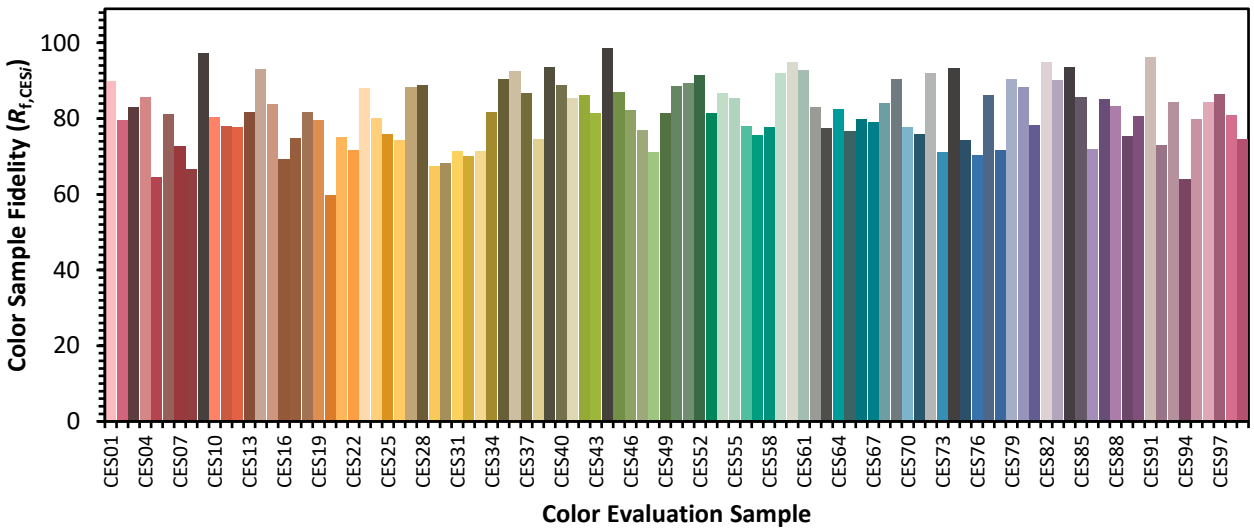
Individual Sample Fidelity Index ($R_{f,i}$)

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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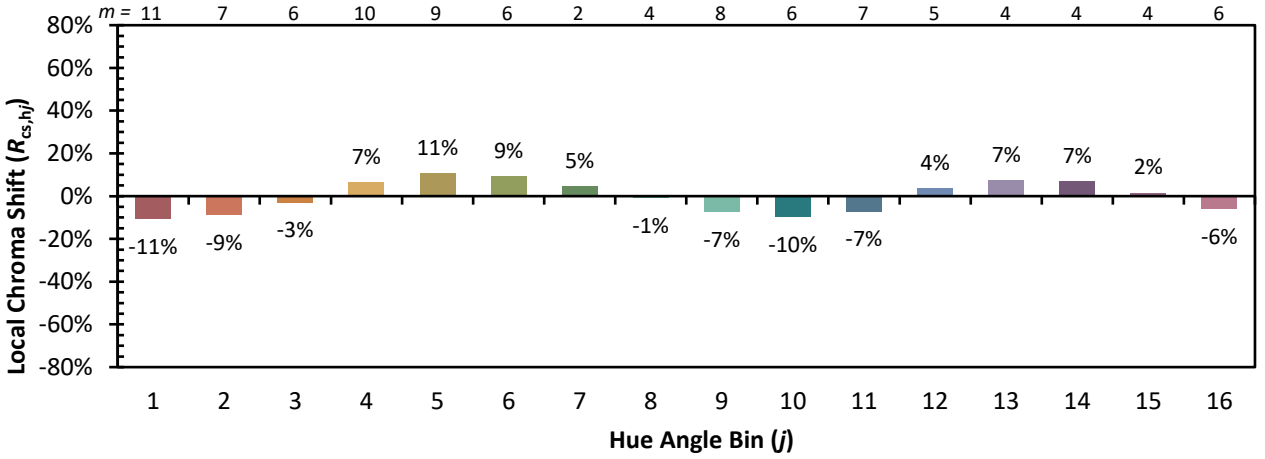
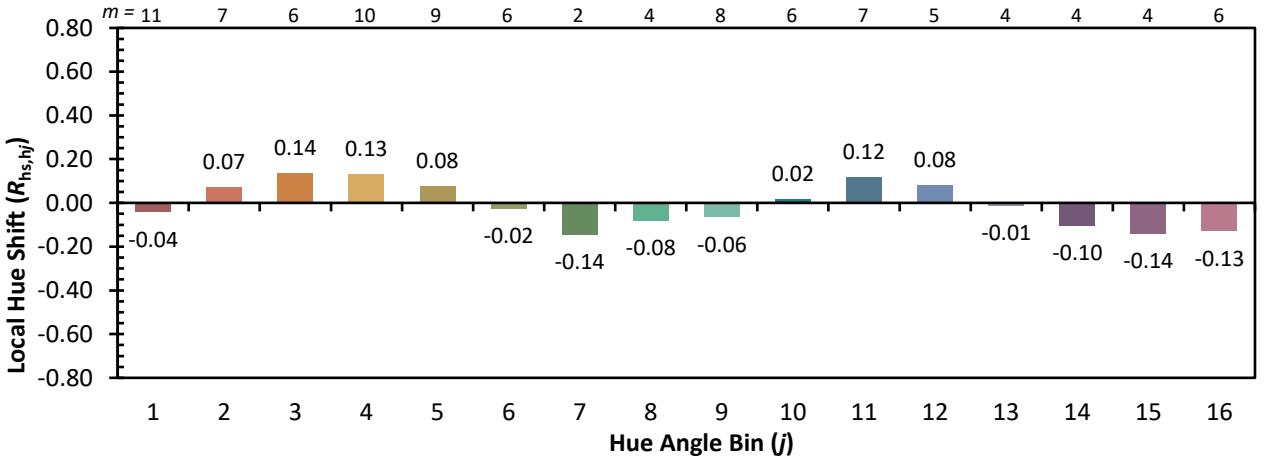
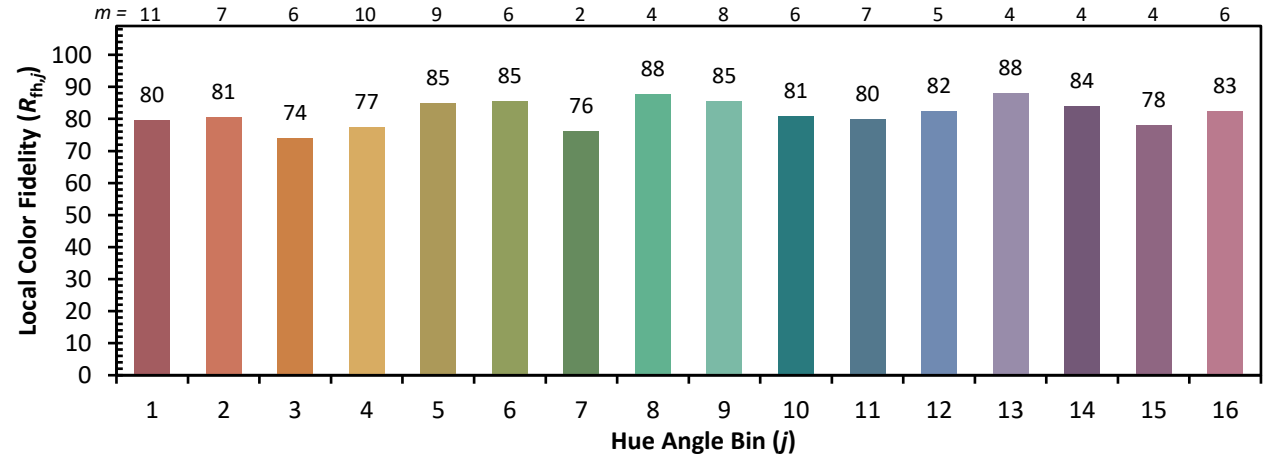
Color Rendition by Hue-Angle Bin







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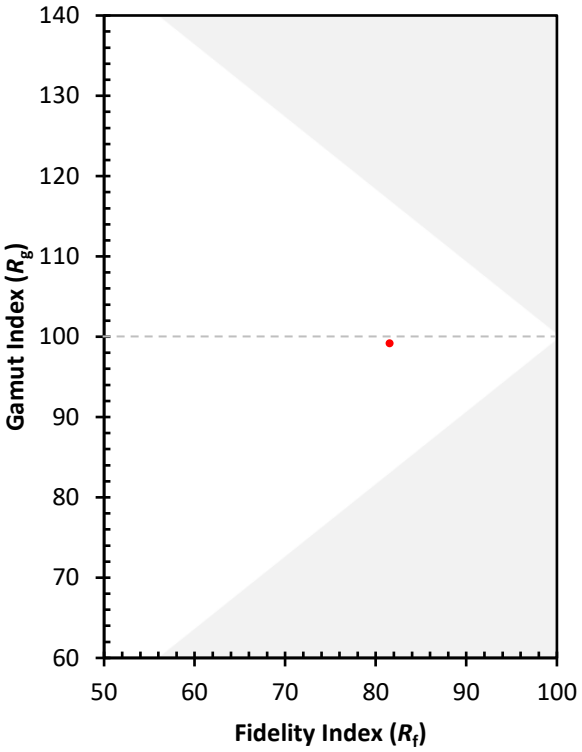
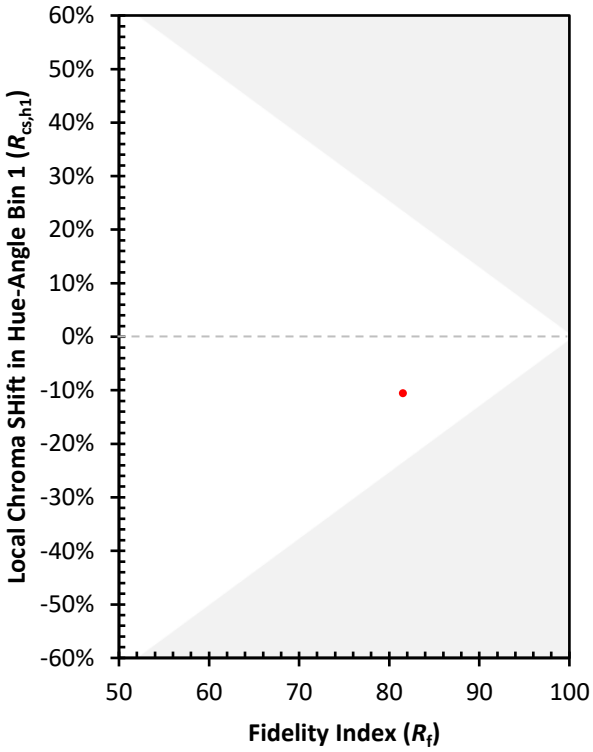
Measure Comparisons





(END OF REPORT)