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: P637981

Luminaire Tested: GWS-SA4D-830-U-SL3-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:	P637981
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-31)
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
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19061.2 lumens
Efficiency:	N/A
Efficacy:	117.6 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B3 - U0 - G3

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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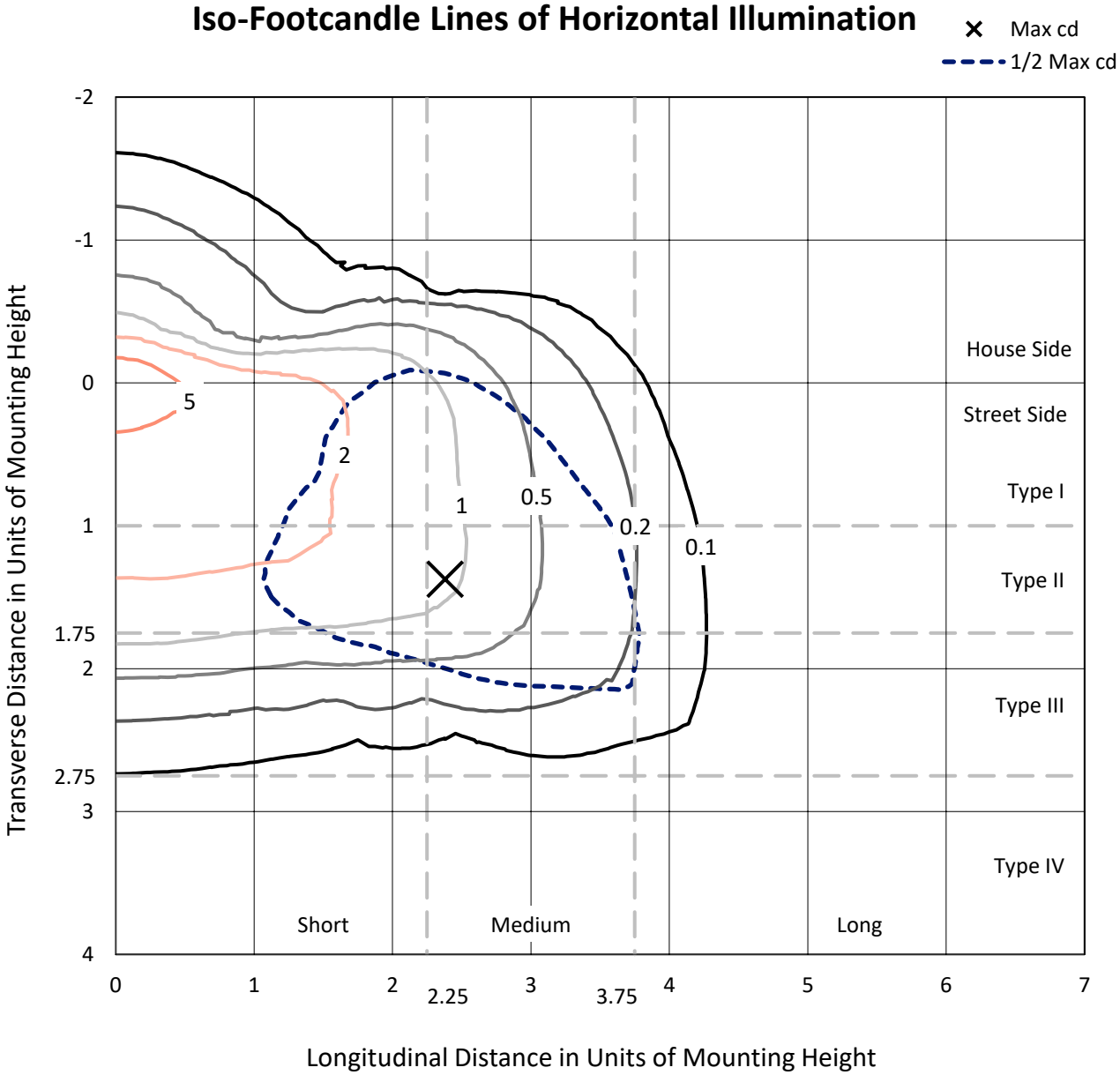
Scaled Data Report

REPORT NUMBER: P637981
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
Type III - Medium - N/A

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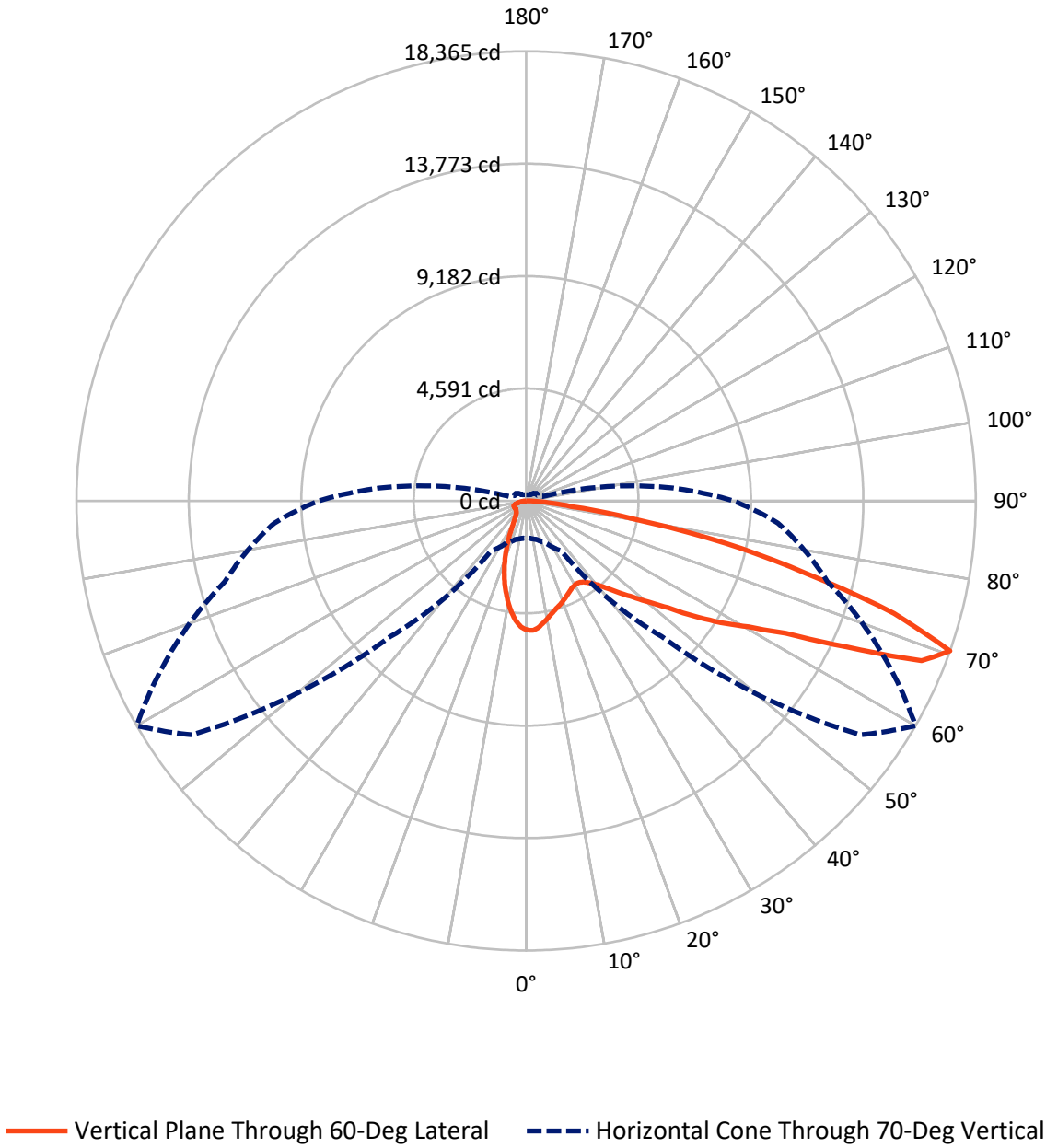
Luminous Intensity Polar Plot



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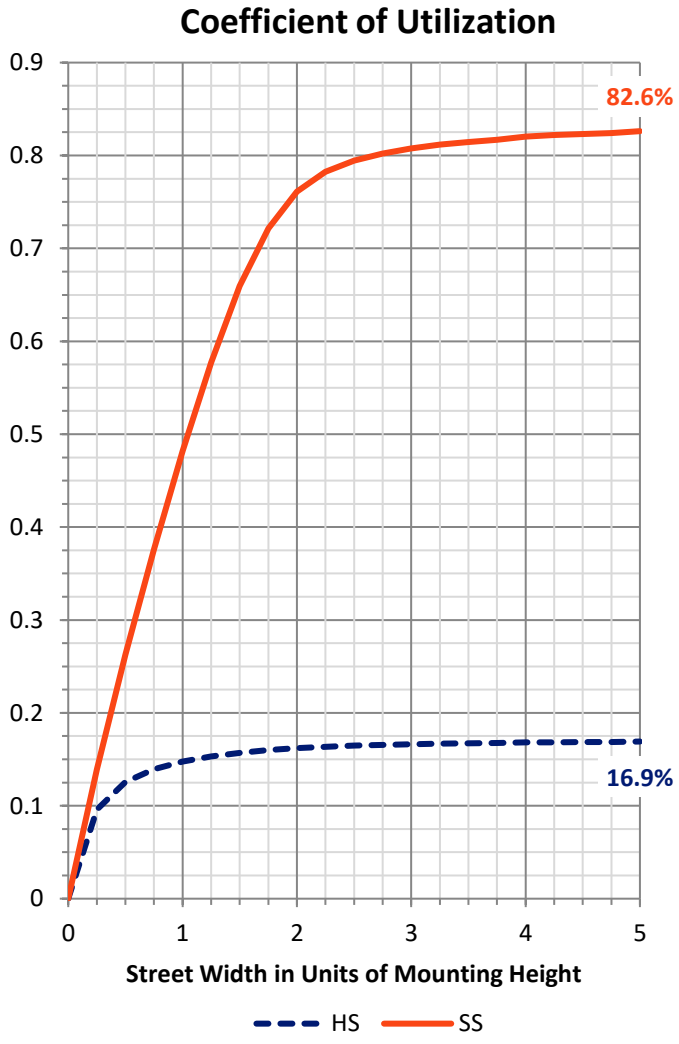
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3259.9	0.0	3259.9
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	15801.3	0.0	15801.3
	% Fixture	82.9	0.0	82.9
Total	Lumens	19061.2	0.0	19061.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	454.6	2.4
10°-20°	1018.5	5.3
20°-30°	1304.4	6.8
30°-40°	1714.3	9.0
40°-50°	2487.2	13.0
50°-60°	3880.6	20.4
60°-70°	5080.5	26.7
70°-80°	2809.3	14.7
80°-90°	311.8	1.6
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°	19061.2	100.0
0°-180°	19061.2	100.0



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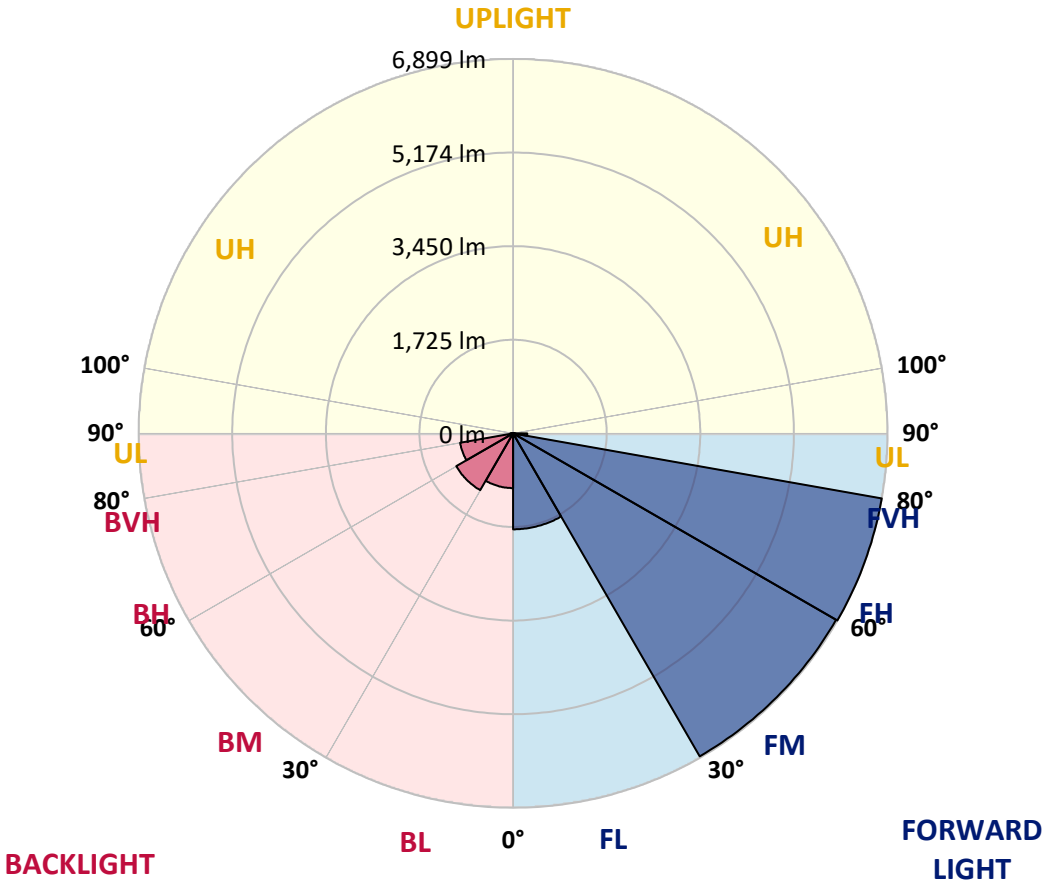
REPORT NUMBER: P637981
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1769.0	9.3			
FM	(30°-60°)	6873.4	36.1			
FH	(60°-80°)	6899.1	36.2			G3/7500
FVH	(80°-90°)	259.8	1.4			G3/500
BL	(0°-30°)	1008.6	5.3	B3/2500		
BM	(30°-60°)	1208.7	6.3	B2/2500		
BH	(60°-80°)	990.7	5.2	B2/1000		G2/1000
BVH	(80°-90°)	52.0	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-G3
Type III Medium



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Scaled Data Report

REPORT NUMBER: P637981
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5
2.5°	5200.6	5206.1	5221.5	5243.8	5266.1	5277.3	5305.2	5296.8	5291.2	5280.1	5266.1
5°	4970.5	4981.6	4995.6	5038.8	5087.6	5126.7	5189.4	5196.4	5199.2	5204.7	5182.4
7.5°	4677.6	4680.4	4713.8	4771.0	4835.2	4902.1	5006.7	5036.0	5061.1	5089.0	5070.9
10°	4354.0	4361.0	4386.1	4468.4	4578.6	4677.6	4818.4	4867.2	4920.2	4981.6	4956.5
12.5°	4089.0	4090.4	4130.9	4218.7	4338.7	4472.6	4648.3	4706.9	4776.6	4872.8	4850.5
15°	3878.5	3878.5	3916.1	3991.4	4129.5	4287.1	4496.3	4571.6	4666.4	4796.1	4757.1
17.5°	3711.1	3712.5	3736.2	3815.7	3938.4	4112.8	4361.0	4462.8	4567.4	4738.9	4680.4
20°	3623.2	3616.3	3620.5	3669.3	3773.9	3942.6	4225.7	4344.3	4485.1	4699.9	4610.6
22.5°	3619.1	3606.5	3588.4	3592.6	3653.9	3793.4	4080.7	4224.3	4401.4	4667.8	4539.5
25°	3690.2	3676.2	3644.2	3607.9	3602.3	3686.0	3944.0	4107.2	4315.0	4653.9	4471.2
27.5°	3810.1	3800.4	3758.5	3704.1	3647.0	3644.2	3840.8	4010.9	4252.2	4667.8	4422.4
30°	3969.1	3952.4	3925.9	3856.1	3769.7	3680.4	3800.4	3959.3	4210.4	4712.4	4401.4
32.5°	4149.0	4139.3	4114.2	4044.4	3952.4	3810.1	3832.4	3970.5	4210.4	4790.5	4405.6
35°	4340.1	4338.7	4338.7	4292.7	4190.9	4013.7	3959.3	4065.3	4274.5	4916.1	4450.3
37.5°	4525.6	4524.2	4568.8	4585.5	4469.8	4278.7	4175.5	4255.0	4415.4	5101.5	4560.4
40°	4676.2	4681.8	4779.4	4863.1	4798.9	4621.8	4476.8	4517.2	4644.1	5365.1	4752.9
42.5°	4828.2	4843.5	4990.0	5137.8	5162.9	5009.5	4863.1	4886.8	4971.8	5713.8	5040.2
45°	4994.2	5001.1	5206.1	5412.5	5533.9	5443.2	5323.3	5355.4	5374.9	6144.7	5468.3
47.5°	5154.5	5172.7	5437.7	5720.8	5950.9	5942.5	5875.6	5865.8	5870.0	6669.1	5974.6
50°	5373.5	5400.0	5711.0	6052.7	6390.2	6545.0	6564.5	6490.6	6459.9	7252.1	6605.0
52.5°	5789.1	5789.1	6068.0	6404.1	6857.4	7240.9	7372.0	7250.7	7153.0	7868.5	7274.4
55°	6309.3	6331.6	6553.4	6825.3	7399.9	7973.1	8416.6	8282.7	8006.6	8539.3	7975.9
57.5°	6540.8	6568.7	6920.1	7342.7	8109.8	8805.7	9420.7	9373.3	8970.2	9236.6	8703.9
60°	6122.4	6181.0	6664.9	7373.4	8752.7	10148.7	10582.4	10444.4	9868.4	9968.8	9493.2
62.5°	5107.1	5171.3	5708.2	6697.0	8663.4	11600.5	12413.6	11904.5	10989.7	10893.4	10544.8
65°	3047.3	3044.5	3690.2	5001.1	7563.1	12003.6	15311.6	14361.9	12721.8	12162.5	11627.0
67.5°	1937.1	1933.0	2068.2	2649.8	5033.2	11016.2	17174.8	17421.7	15074.5	13095.6	11716.3
70°	1528.5	1527.1	1624.7	1889.7	2489.4	7839.2	16656.0	18364.5	16495.7	12739.9	10316.1
72.5°	1114.3	1117.1	1267.7	1582.9	1920.4	3935.6	13487.4	15713.3	15172.2	11246.3	8374.7
75°	800.5	804.7	895.4	1211.9	1771.2	2151.9	8968.8	11815.3	11543.3	9014.9	5761.2
77.5°	509.0	514.6	594.1	849.3	1430.9	1737.7	5437.7	8341.3	7680.2	5079.2	2048.7
80°	311.0	329.1	396.1	633.2	1143.6	1304.0	2718.1	4394.5	3846.4	1393.2	688.9
82.5°	160.4	174.3	238.5	391.9	788.0	1145.0	1538.3	1846.5	1191.0	583.0	366.8
85°	50.2	58.6	83.7	159.0	375.2	709.9	1018.1	917.7	546.7	274.7	170.1
87.5°	12.6	12.6	13.9	13.9	15.3	32.1	196.6	207.8	145.0	86.5	69.7
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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Scaled Data Report

REPORT NUMBER: P637981
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5	5274.5
2.5°	5238.2	5204.7	5190.8	5189.4	5154.5	5104.3	5070.9	5047.2	5033.2	5030.4	5030.4
5°	5144.8	5101.5	5044.4	5001.1	4907.7	4812.9	4733.4	4688.7	4637.1	4630.2	4628.8
7.5°	5020.7	4957.9	4849.1	4727.8	4564.6	4407.0	4273.1	4182.5	4091.8	4075.1	4069.5
10°	4886.8	4801.7	4616.2	4402.8	4158.8	3923.1	3718.1	3557.7	3451.7	3376.4	3362.4
12.5°	4754.3	4641.3	4369.4	4051.4	3716.7	3394.5	3086.3	2824.1	2634.5	2524.3	2504.8
15°	4630.2	4472.6	4100.2	3694.4	3259.2	2818.5	2382.0	2041.7	1775.4	1680.5	1658.2
17.5°	4517.2	4320.6	3839.4	3324.8	2782.3	2206.3	1709.8	1407.2	1251.0	1203.6	1192.4
20°	4404.2	4164.4	3574.4	2935.7	2276.0	1630.3	1249.6	1107.3	1048.8	1030.6	1025.1
22.5°	4282.9	3992.8	3285.7	2552.2	1764.2	1220.3	1022.3	959.5	941.4	942.8	941.4
25°	4161.6	3818.5	2983.1	2135.2	1313.7	990.2	892.6	868.9	873.0	885.6	888.4
27.5°	4061.2	3663.7	2686.1	1677.7	1026.4	852.1	806.1	804.7	820.0	836.8	839.6
30°	3988.6	3525.6	2393.2	1290.0	845.1	757.3	739.2	747.5	765.7	778.2	782.4
32.5°	3937.0	3407.1	2080.8	1013.9	740.5	690.3	682.0	690.3	701.5	714.0	716.8
35°	3918.9	3320.6	1774.0	827.0	669.4	641.5	636.0	640.1	645.7	652.7	655.5
37.5°	3959.3	3277.4	1453.2	719.6	626.2	609.5	601.1	598.3	599.7	602.5	603.9
40°	4079.3	3296.9	1191.0	656.9	598.3	583.0	569.0	563.4	562.0	564.8	563.4
42.5°	4285.7	3379.2	1001.3	620.6	576.0	553.7	538.3	532.7	532.7	539.7	539.7
45°	4588.3	3541.0	864.7	594.1	556.5	528.6	511.8	509.0	514.6	525.8	527.2
47.5°	5031.8	3778.0	782.4	574.6	538.3	506.2	489.5	488.1	499.3	517.4	518.8
50°	5557.6	4119.7	737.8	560.6	525.8	488.1	471.4	472.8	485.3	504.9	509.0
52.5°	6190.8	4585.5	740.5	555.1	518.8	477.0	460.2	457.4	470.0	489.5	493.7
55°	6844.8	5151.8	794.9	556.5	509.0	471.4	449.1	439.3	450.5	464.4	465.8
57.5°	7564.5	5790.5	930.2	553.7	496.5	465.8	439.3	417.0	424.0	432.3	436.5
60°	8376.1	6542.2	1221.7	559.2	490.9	453.3	419.8	390.5	389.1	394.7	396.1
62.5°	9461.2	7564.5	1549.4	569.0	503.5	437.9	390.5	359.8	354.2	357.0	358.4
65°	10291.0	8052.6	1446.2	560.6	530.0	426.8	362.6	330.5	319.4	316.6	316.6
67.5°	9953.5	7406.9	1006.9	538.3	542.5	428.2	340.3	299.8	285.9	278.9	277.5
70°	*8469.6*	*6016.4*	*700.1*	*516.0*	*528.6*	*425.4*	*316.6*	*274.7*	*256.6*	*246.8*	*245.5*
72.5°	6691.4	4593.9	566.2	471.4	479.8	383.5	281.7	246.8	231.5	219.0	219.0
75°	4306.6	2803.2	472.8	419.8	391.9	298.5	244.1	220.4	205.0	192.5	192.5
77.5°	1449.0	1040.4	366.8	355.6	292.9	224.5	205.0	189.7	177.1	166.0	164.6
80°	588.5	493.7	269.2	269.2	205.0	171.5	160.4	153.4	145.0	131.1	131.1
82.5°	341.7	299.8	188.3	163.2	136.7	118.5	111.6	104.6	104.6	94.8	94.8
85°	164.6	166.0	113.0	100.4	78.1	68.3	65.5	61.4	60.0	54.4	53.0
87.5°	89.3	90.7	57.2	44.6	30.7	26.5	22.3	20.9	19.5	18.1	18.1
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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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

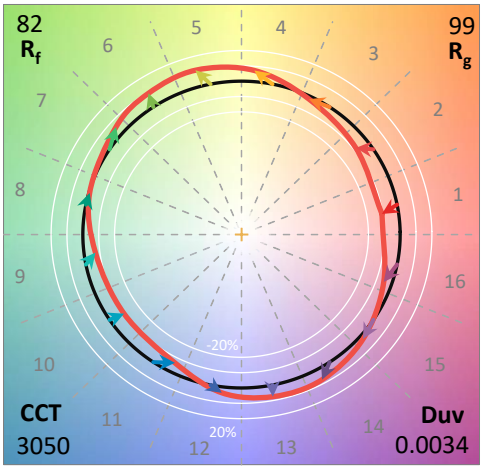
Test Information

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

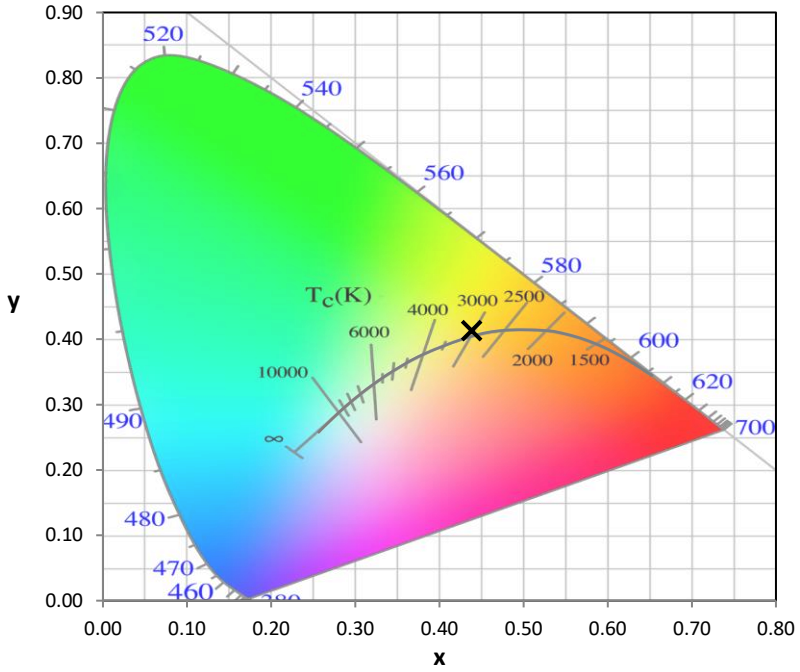
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

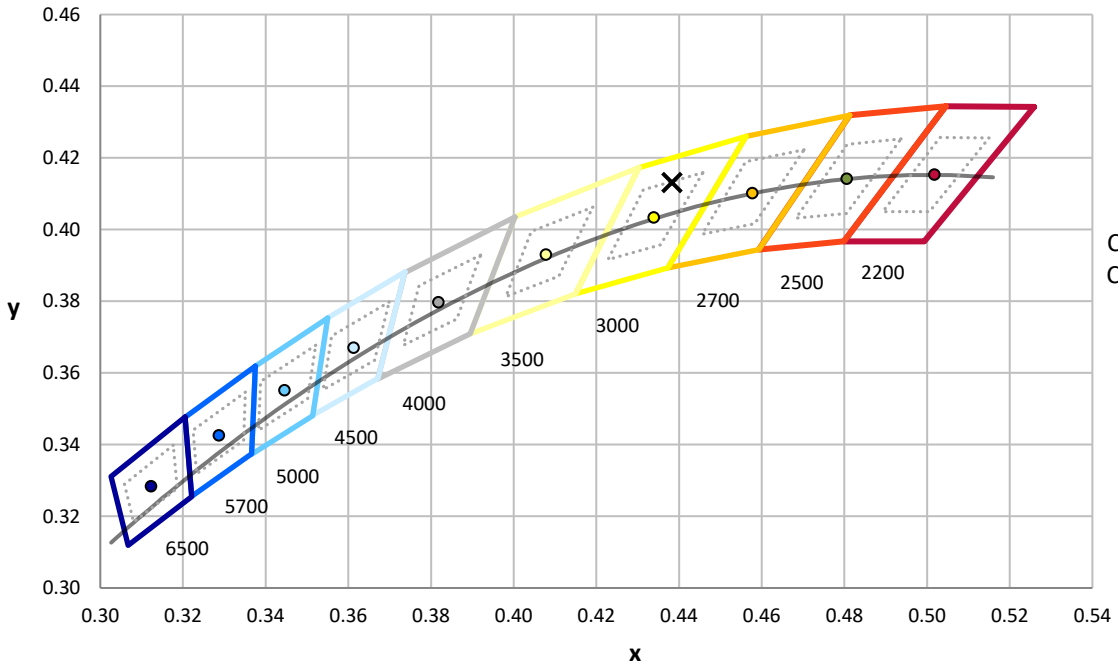
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

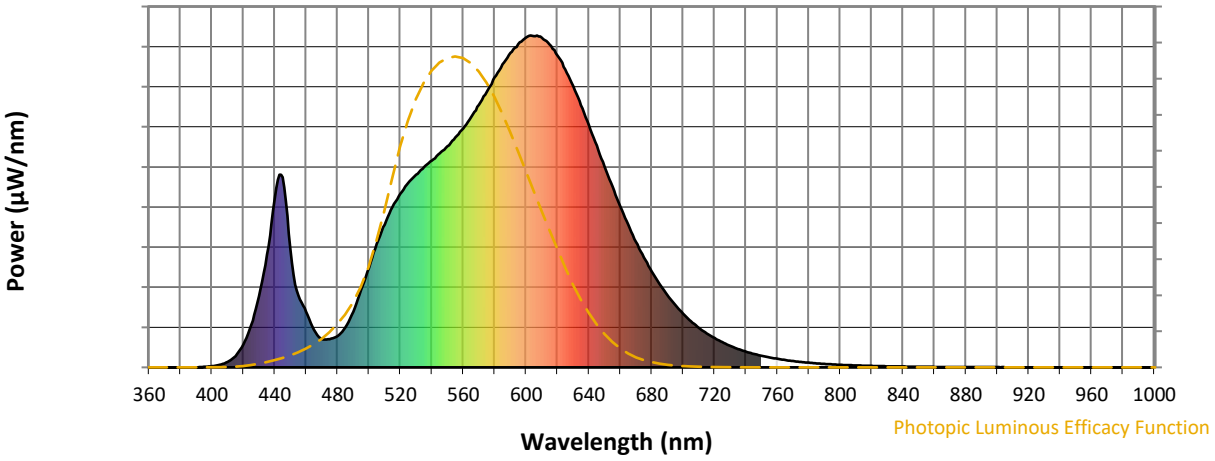


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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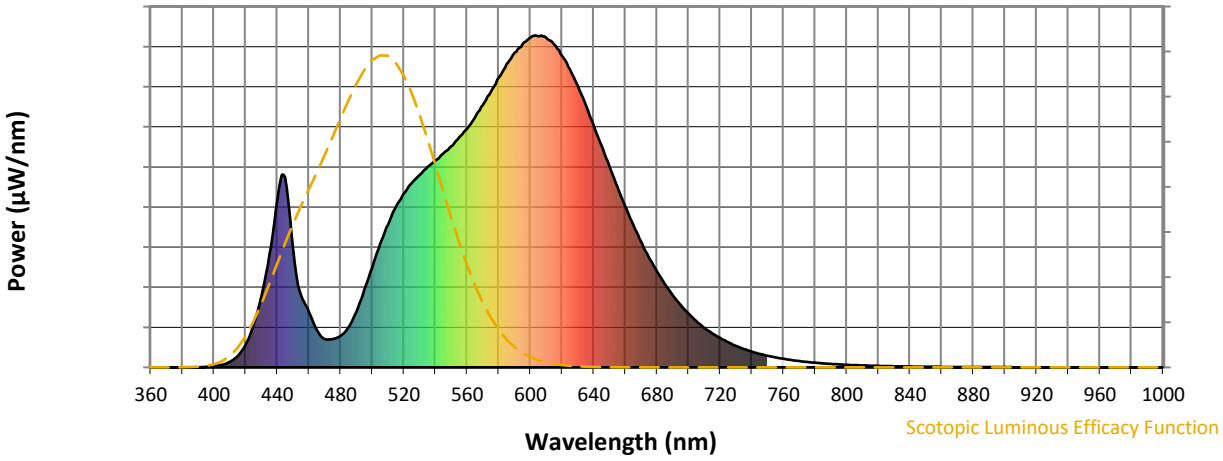
Scotopic Flux vs. Wavelength



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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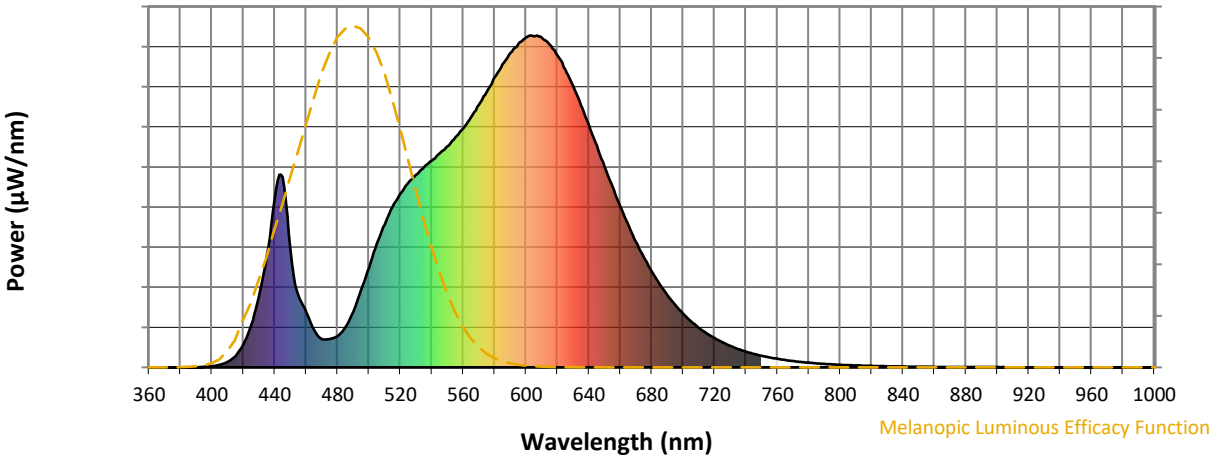
Melanopic Flux vs. Wavelength



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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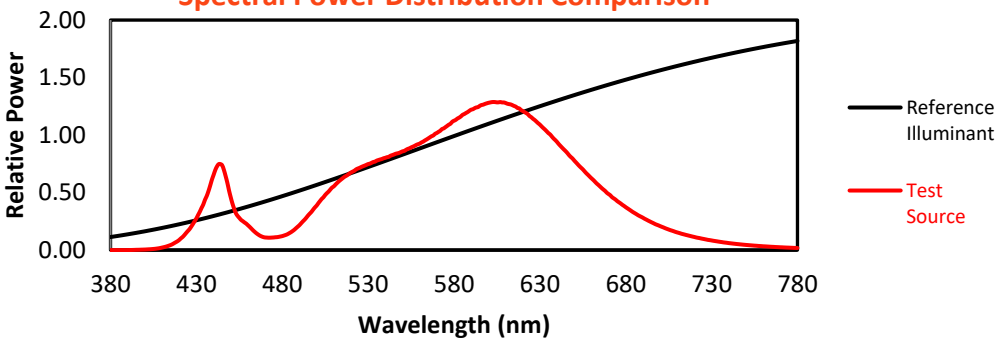
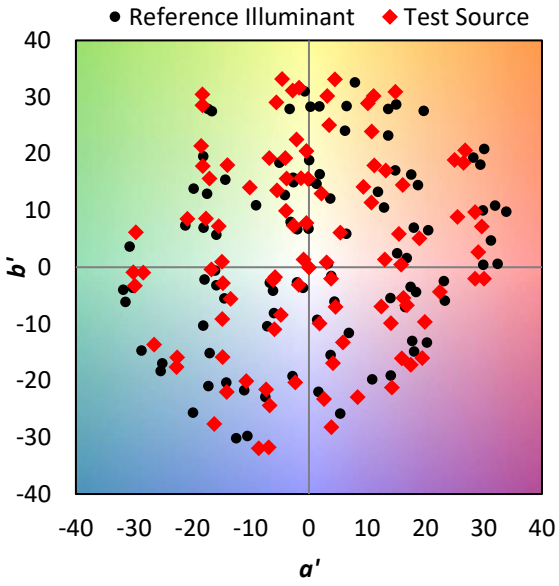
Summary

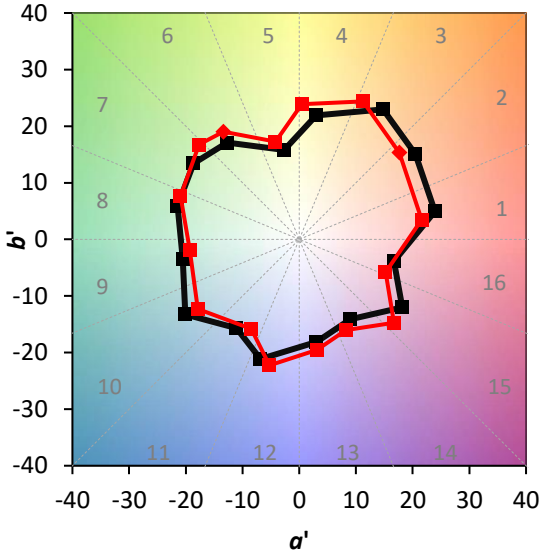
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

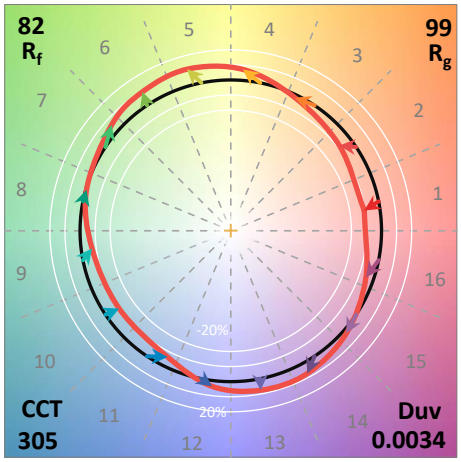
Spectral Power Distribution Comparison

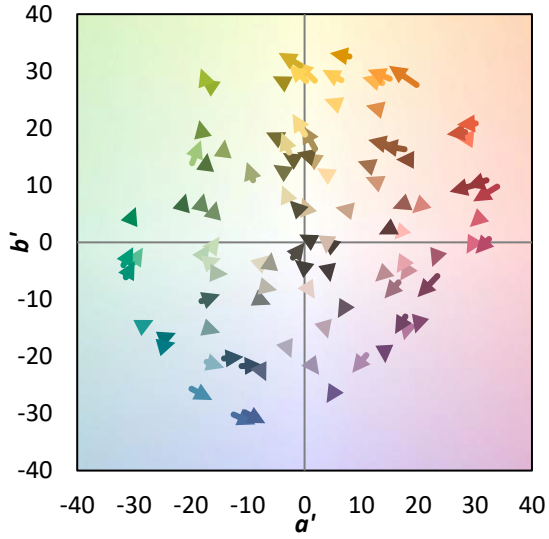


Color Vector Graphics









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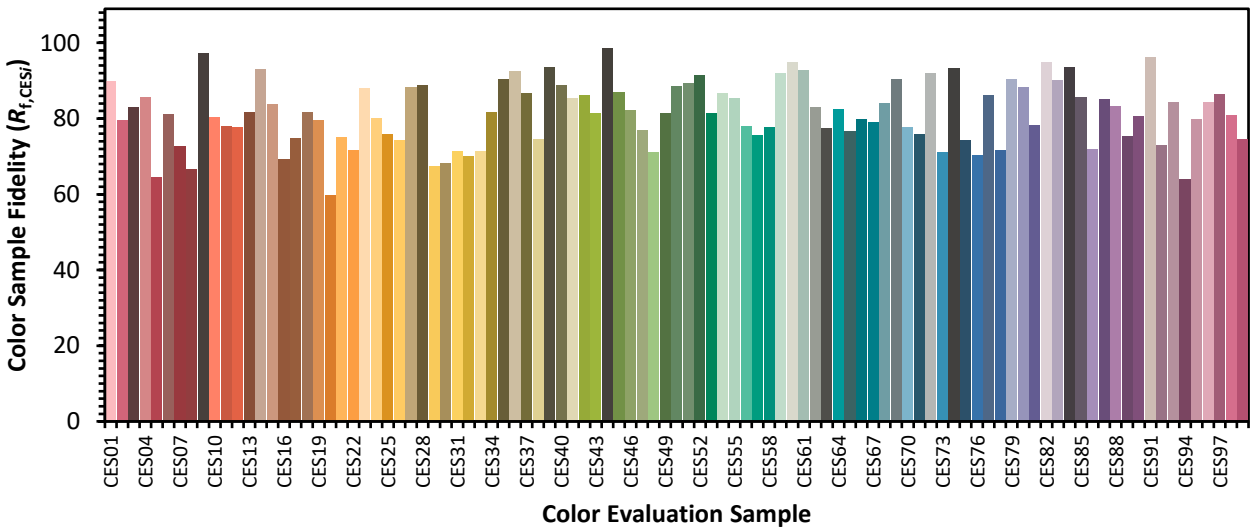
Individual Sample Fidelity Index ($R_{f,i}$)

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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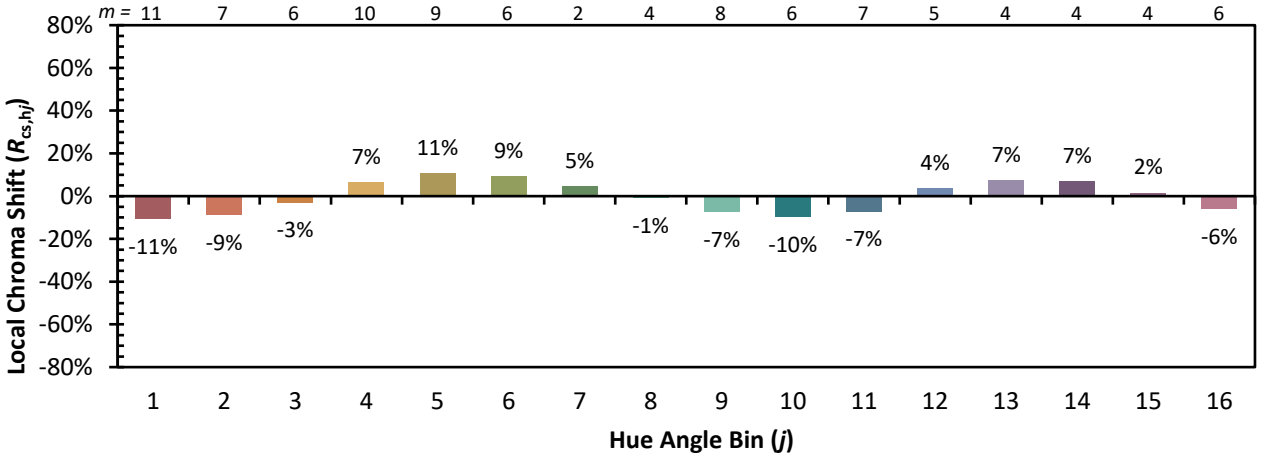
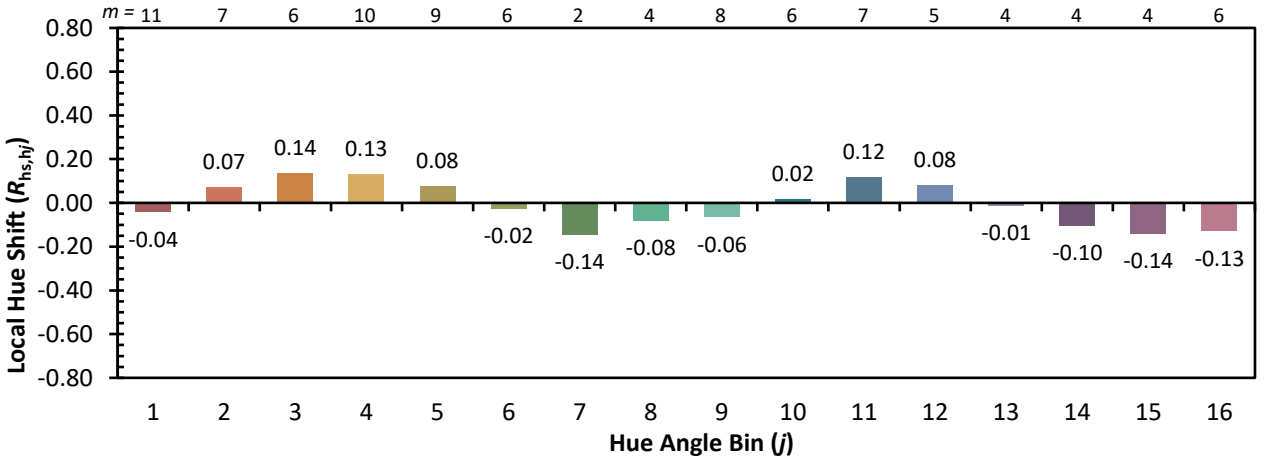
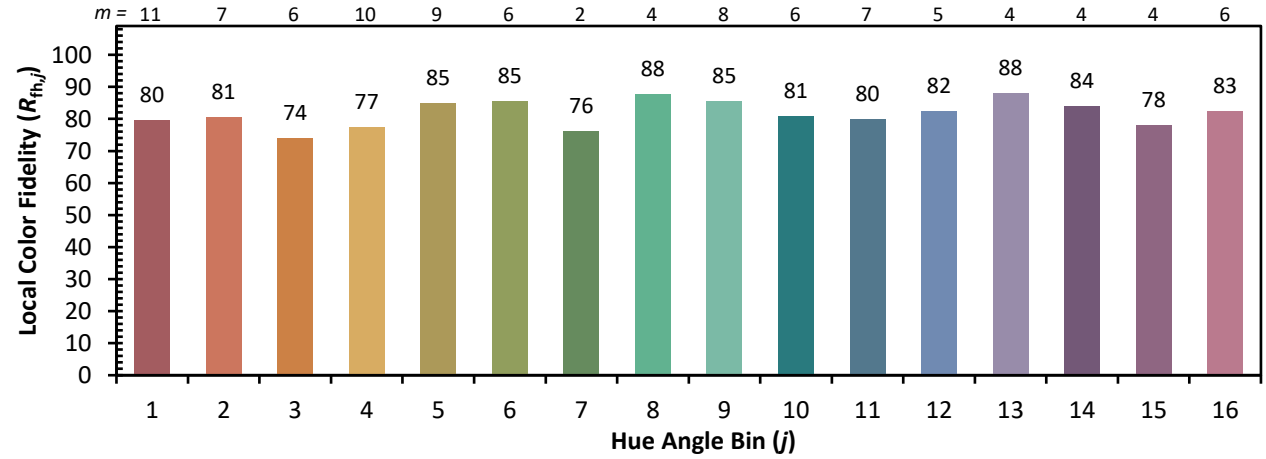
Color Rendition by Hue-Angle Bin







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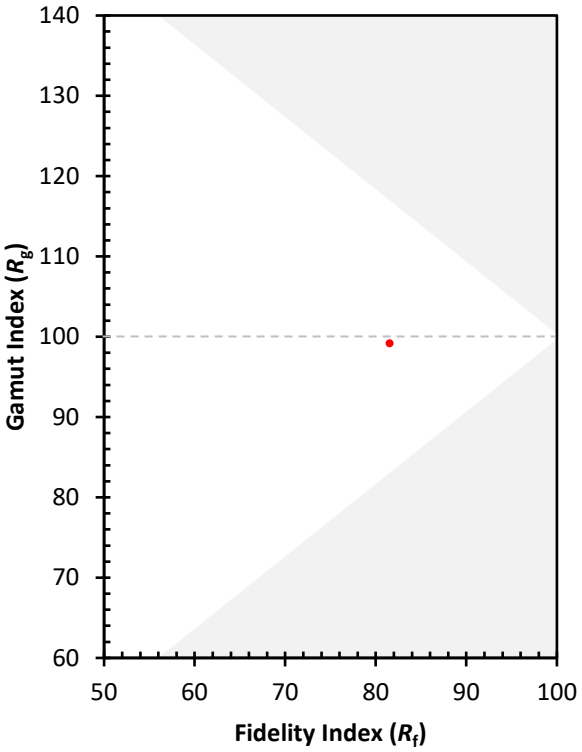
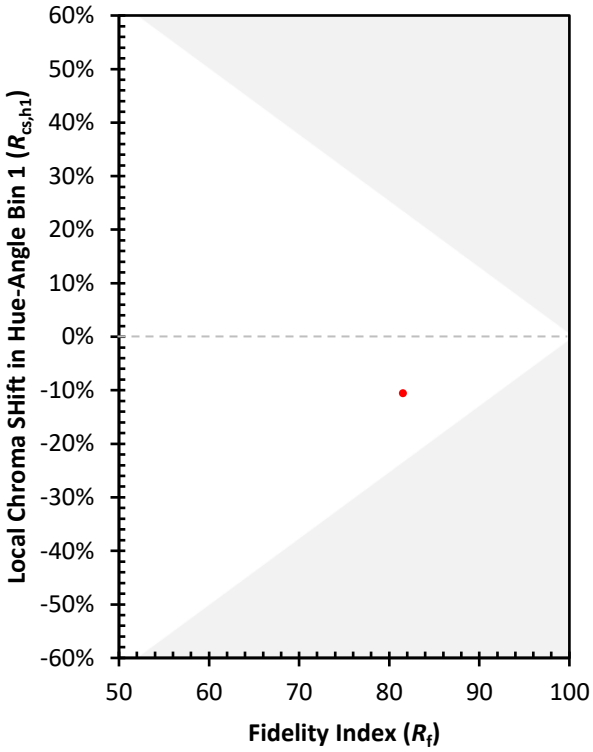
Measure Comparisons





(END OF REPORT)