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: P638962

Luminaire Tested: GWS-SA4F-830-U-RW-W-GRSWH

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:	P638962
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-51)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-RW-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	23826.8 lumens
Efficiency:	N/A
Efficacy:	105.8 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type V - Short
BUG Rating:	B4 - U0 - G1

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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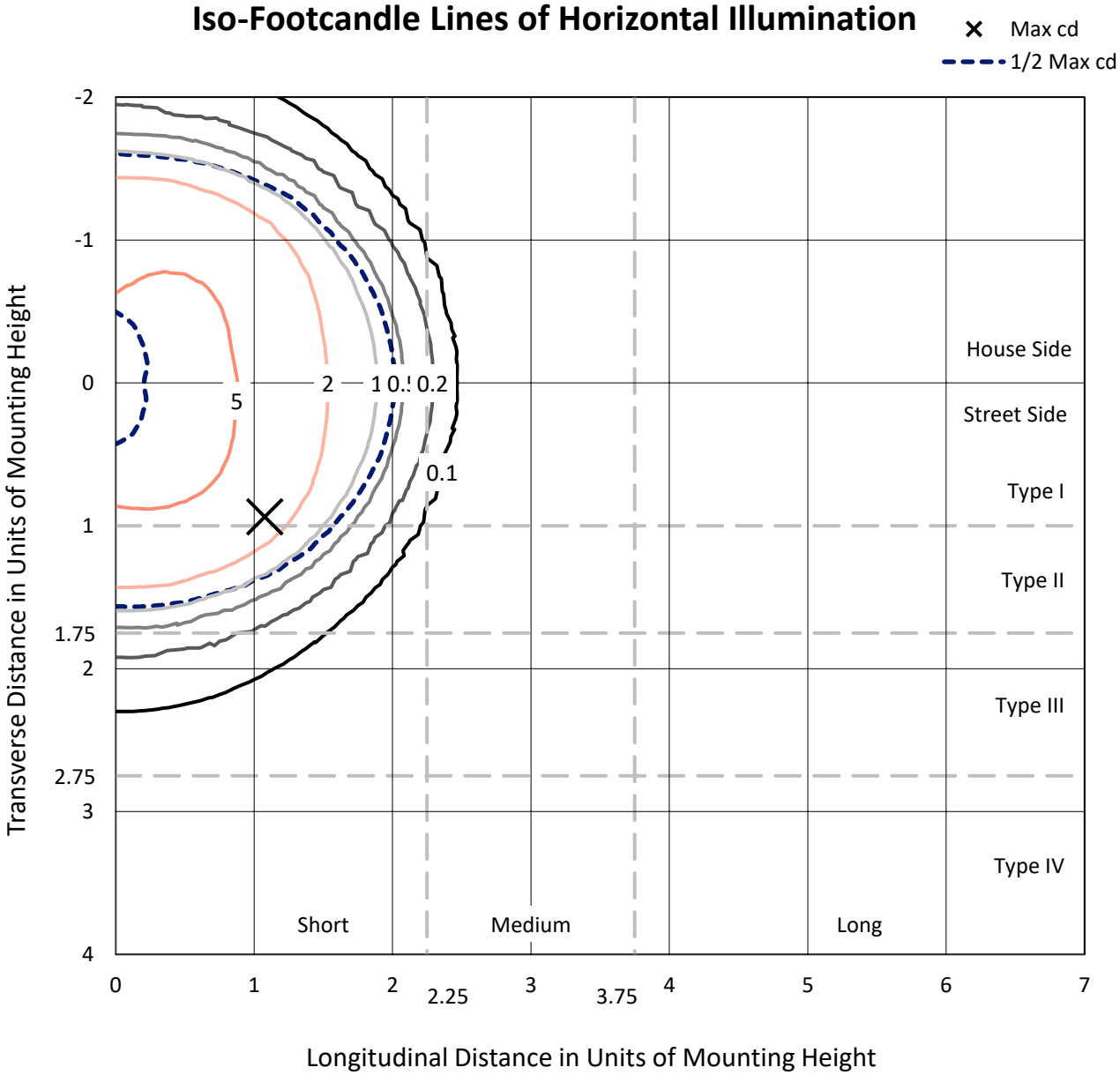
Scaled Data Report

REPORT NUMBER: P638962
CATALOG NUMBER: GWS-SA4F-830-U-RW-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 7 fc
Type V - Short - N/A

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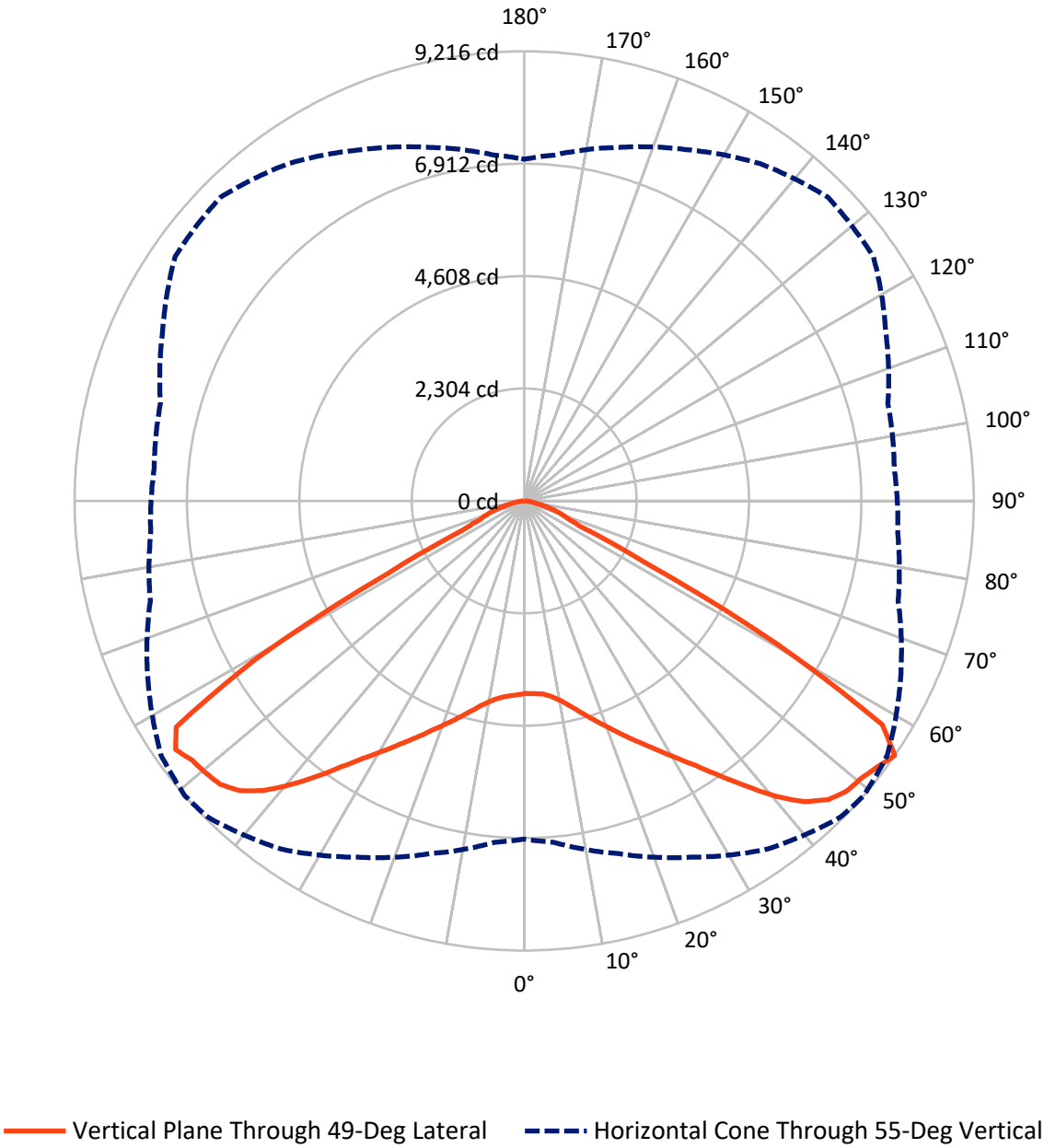
Luminous Intensity Polar Plot



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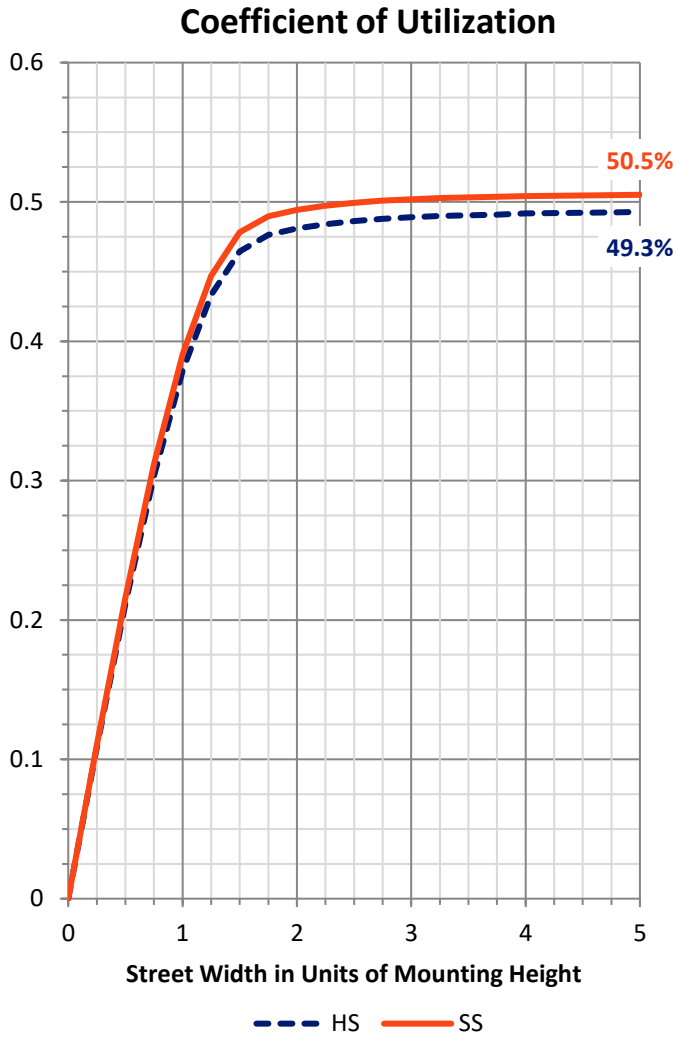
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11796.5	0.0	11796.5
	% Fixture	49.5	0.0	49.5
Street Side	Lumens	12030.3	0.0	12030.3
	% Fixture	50.5	0.0	50.5
Total	Lumens	23826.8	0.0	23826.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.0	1.6
10°-20°	1270.0	5.3
20°-30°	2419.0	10.2
30°-40°	4100.7	17.2
40°-50°	6171.3	25.9
50°-60°	6755.1	28.4
60°-70°	2136.0	9.0
70°-80°	512.6	2.2
80°-90°	76.9	0.3
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°	23826.8	100.0
0°-180°	23826.8	100.0



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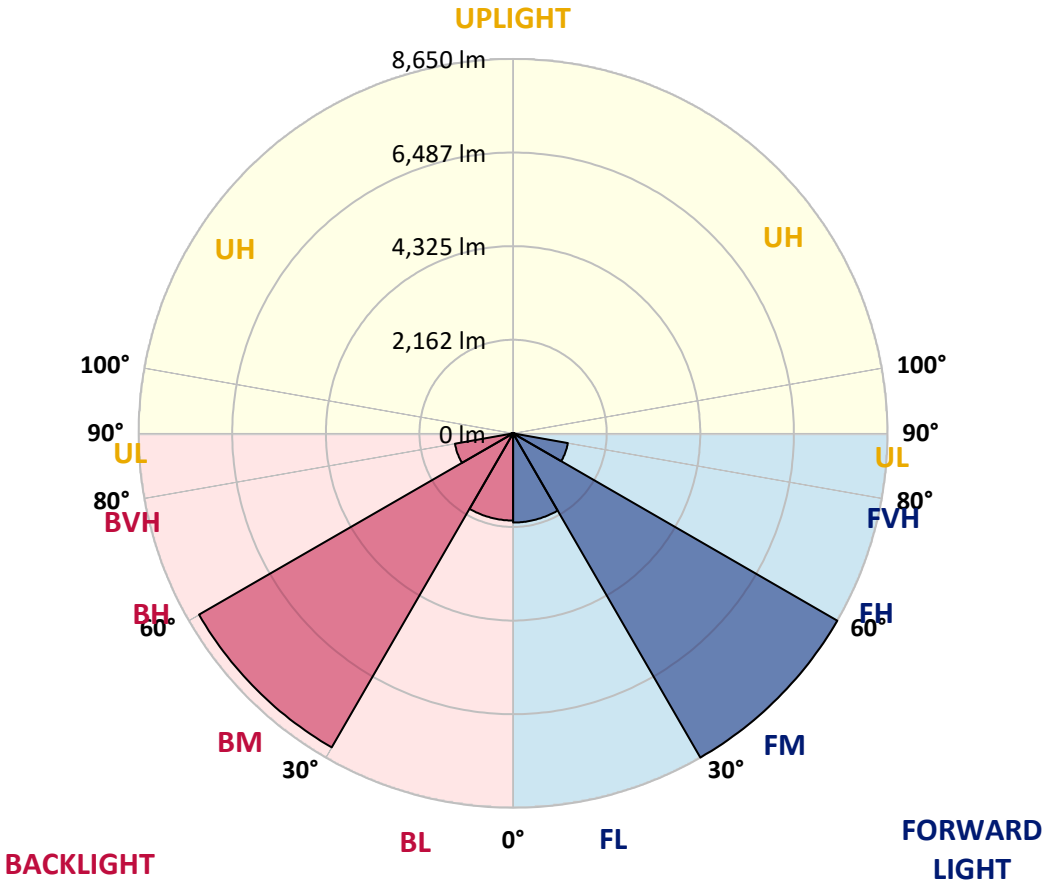
REPORT NUMBER: P638962
CATALOG NUMBER: GWS-SA4F-830-U-RW-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2060.0	8.6			
FM	(30°-60°)	8649.8	36.3			
FH	(60°-80°)	1284.8	5.4			G1/1800
FVH	(80°-90°)	35.6	0.1			G1/100
BL	(0°-30°)	2014.0	8.5	B3/2500		
BM	(30°-60°)	8377.4	35.2	B4/8500		
BH	(60°-80°)	1363.8	5.7	B3/2500		G1/1800
BVH	(80°-90°)	41.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G1
Type V Short



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REPORT NUMBER: P638962
CATALOG NUMBER: GWS-SA4F-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	49°	55°	65°	75°	85°
0°	3947.1	3947.1	3947.1	3947.1	3947.1	3947.1	*3947.1*	3947.1	3947.1	3947.1	3947.1
2.5°	3888.9	3892.8	3900.5	3914.1	3927.7	3947.1	*3954.8*	3964.5	3962.6	3974.2	3974.2
5°	3869.5	3875.4	3887.0	3906.4	3929.6	3966.4	*3976.1*	3999.4	4022.6	4051.7	4061.4
7.5°	3892.8	3900.5	3914.1	3945.1	3980.0	4028.4	*4047.8*	4086.6	4131.1	4183.5	4204.8
10°	3937.4	3947.1	3970.3	4020.7	4076.9	4150.5	*4167.9*	4216.4	4288.1	4359.8	4402.4
12.5°	3987.7	4003.2	4045.9	4125.3	4208.6	4305.5	*4332.7*	4392.7	4470.2	4563.2	4621.4
15°	4045.9	4059.4	4125.3	4237.7	4367.5	4495.4	*4526.4*	4584.6	4671.7	4762.8	4844.2
17.5°	4167.9	4191.2	4268.7	4398.5	4549.7	4700.8	*4735.7*	4801.6	4871.3	4943.0	5020.5
20°	4334.6	4354.0	4452.8	4613.6	4791.9	4929.5	*4964.3*	5022.5	5055.4	5092.2	5158.1
22.5°	4501.2	4528.4	4640.7	4830.6	5039.9	5189.1	*5216.2*	5270.5	5247.2	5235.6	5278.2
25°	4708.6	4745.4	4855.8	5063.2	5276.3	5460.4	*5481.7*	5528.2	5489.4	5429.4	5427.4
27.5°	4966.3	4999.2	5113.5	5326.7	5537.9	5729.7	*5770.4*	5832.4	5747.2	5673.5	5621.2
30°	5272.4	5293.7	5419.7	5646.4	5863.4	6045.6	*6097.9*	6159.9	6095.9	5973.9	5921.5
32.5°	5629.0	5658.0	5803.4	6041.7	6235.5	6417.6	*6469.9*	6547.4	6477.7	6340.1	6274.2
35°	6057.2	6086.3	6239.3	6499.0	6696.6	6884.6	*6921.4*	6985.3	6898.1	6739.3	6686.9
37.5°	6522.2	6559.0	6752.8	6998.9	7206.2	7425.2	*7427.1*	7446.5	7322.5	7124.8	7066.7
40°	7045.4	7093.8	7287.6	7543.4	7793.3	7971.6	*7969.7*	7915.4	7706.2	7400.0	7310.9
42.5°	7562.8	7601.5	7797.2	8060.7	8310.7	8479.3	*8428.9*	8297.1	7994.9	7578.3	7460.1
45°	7936.7	7965.8	8171.2	8467.7	8721.5	8826.1	*8735.1*	8576.2	8167.3	7690.7	7516.3
47.5°	8113.1	8151.8	8359.2	8653.7	8940.5	9000.5	*8892.0*	8742.8	8268.1	7795.3	7560.8
50°	8018.1	8068.5	8303.0	8576.2	8899.8	9023.8	*8946.3*	8797.1	8374.7	7898.0	7640.3
52.5°	7772.0	7820.5	8116.9	8448.3	8814.5	9060.6	*9058.7*	8936.6	8496.7	7927.0	7644.1
55°	*6931.1*	*7026.0*	*7487.2*	*8058.8*	*8709.9*	*9169.1*	*9215.6*	*9085.8*	*8516.1*	*7934.8*	*7684.8*
57.5°	4510.9	4677.6	5115.5	5859.5	7165.5	8339.8	*8653.7*	8684.7	8376.6	7901.9	7692.6
60°	1883.4	2017.1	2364.0	2858.1	3937.4	5334.4	*5942.9*	6553.2	7289.6	7557.0	7620.9
62.5°	1170.4	1182.0	1216.9	1329.2	1689.7	2371.7	*2763.1*	3334.7	4429.5	5361.6	5791.7
65°	1056.0	1061.8	1069.6	1061.8	1079.3	1162.6	*1267.2*	1466.8	1912.5	2375.6	2925.9
67.5°	930.1	937.8	943.7	937.8	943.7	947.5	*959.2*	976.6	1058.0	1123.9	1174.2
70°	751.8	763.4	773.1	769.3	792.5	792.5	*804.1*	817.7	858.4	906.8	941.7
72.5°	573.6	563.9	575.5	579.4	600.7	612.3	*629.7*	645.2	691.8	720.8	765.4
75°	372.0	362.3	379.8	389.5	418.5	434.0	*449.5*	465.0	498.0	517.4	560.0
77.5°	201.5	199.6	217.0	230.6	261.6	281.0	*292.6*	304.2	331.3	337.2	364.3
80°	116.3	116.3	127.9	137.6	157.0	178.3	*189.9*	199.6	219.0	224.8	236.4
82.5°	63.9	63.9	69.8	75.6	91.1	102.7	*112.4*	120.1	137.6	143.4	149.2
85°	31.0	29.1	32.9	36.8	42.6	48.4	*54.3*	58.1	71.7	75.6	83.3
87.5°	3.9	3.9	3.9	5.8	7.8	11.6	*13.6*	13.6	21.3	25.2	29.1
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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CATALOG NUMBER: GWS-SA4F-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3947.1	3947.1	3947.1	3947.1	3947.1	3947.1	3947.1	3947.1	3947.1	3947.1	3947.1
2.5°	3985.8	3960.6	3976.1	3981.9	3981.9	3976.1	3950.9	3943.2	3931.6	3914.1	3914.1
5°	4074.9	4055.6	4059.4	4049.8	4026.5	3997.4	3950.9	3927.7	3908.3	3887.0	3885.0
7.5°	4228.0	4202.8	4199.0	4162.1	4100.1	4038.1	3968.4	3925.7	3896.7	3869.5	3867.6
10°	4427.6	4404.3	4375.3	4301.6	4210.6	4119.5	4024.6	3966.4	3923.8	3885.0	3883.1
12.5°	4650.4	4623.3	4569.0	4460.5	4346.2	4257.1	4148.6	4059.4	3995.5	3943.2	3933.5
15°	4892.6	4853.9	4760.9	4633.0	4520.6	4425.7	4309.4	4181.5	4084.6	4001.3	3991.6
17.5°	5078.7	5028.3	4927.5	4807.4	4714.4	4619.4	4468.3	4307.5	4167.9	4063.3	4047.8
20°	5206.5	5165.9	5051.5	4962.4	4908.1	4824.8	4648.5	4466.4	4309.4	4177.6	4169.9
22.5°	5324.7	5276.3	5163.9	5111.6	5111.6	5055.4	4886.8	4671.7	4487.7	4334.6	4315.2
25°	5458.4	5406.1	5320.9	5315.1	5342.2	5317.0	5113.5	4883.0	4667.9	4495.4	4464.4
27.5°	5644.5	5586.3	5536.0	5570.8	5609.6	5582.5	5355.7	5088.3	4861.6	4687.2	4660.1
30°	5940.9	5869.2	5822.7	5865.4	5940.9	5861.5	5615.4	5332.5	5103.8	4912.0	4898.5
32.5°	6285.8	6204.5	6156.0	6223.8	6291.6	6167.6	5923.5	5652.2	5411.9	5210.4	5187.2
35°	6700.5	6597.8	6526.1	6617.2	6686.9	6564.9	6322.6	6064.9	5797.5	5588.3	5557.3
37.5°	7068.7	6944.6	6896.2	7024.1	7117.1	7037.7	6774.1	6531.9	6239.3	6010.7	5997.1
40°	7336.1	7214.0	7179.1	7390.3	7553.1	7533.7	7297.3	7020.2	6745.1	6481.5	6456.3
42.5°	7452.3	7367.1	7374.8	7659.6	7911.5	8035.6	7824.4	7527.9	7262.4	6989.2	6971.8
45°	7477.5	7425.2	7487.2	7843.7	8175.1	8428.9	8248.7	8000.7	7700.3	7436.8	7429.1
47.5°	7504.6	7475.6	7570.5	7948.4	8341.7	8636.2	8535.5	8279.7	7975.5	7717.8	7698.4
50°	7568.6	7557.0	7663.5	8022.0	8421.2	8692.4	8578.1	8324.3	8012.3	7758.5	7712.0
52.5°	7588.0	7568.6	7721.7	8136.3	8552.9	8690.5	8444.4	8113.1	7799.2	7516.3	7467.8
55°	*7648.0*	*7613.1*	*7717.8*	*8178.9*	*8735.1*	*8802.9*	*8436.7*	*7940.6*	*7502.7*	*7117.1*	*7002.8*
57.5°	7663.5	7624.8	7692.6	8109.2	8537.4	8477.3	7415.5	6407.9	5582.5	5154.2	5202.7
60°	7580.2	7591.8	7475.6	7429.1	6847.8	6045.6	4540.0	3629.3	2850.3	2520.9	2592.6
62.5°	5770.4	5818.9	5421.6	4714.4	3625.4	2873.6	1900.9	1476.5	1249.8	1191.7	1201.4
65°	2912.3	2978.2	2565.5	2121.8	1577.3	1275.0	1102.5	1067.7	1056.0	1042.5	1042.5
67.5°	1152.9	1172.3	1156.8	1083.2	1007.6	980.5	972.7	968.8	955.3	947.5	949.5
70°	926.2	941.7	918.5	872.0	841.0	839.0	835.1	827.4	817.7	817.7	823.5
72.5°	755.7	771.2	738.3	709.2	685.9	668.5	658.8	653.0	639.4	639.4	645.2
75°	556.1	565.8	538.7	534.8	509.6	492.2	476.7	468.9	451.5	443.7	449.5
77.5°	370.1	368.2	354.6	354.6	344.9	323.6	306.2	288.7	265.5	250.0	253.8
80°	240.3	240.3	234.5	234.5	224.8	207.3	186.0	168.6	155.0	143.4	143.4
82.5°	153.1	151.1	149.2	147.3	143.4	125.9	110.4	98.8	89.1	81.4	83.3
85°	85.3	85.3	81.4	81.4	73.6	63.9	56.2	48.4	42.6	40.7	40.7
87.5°	29.1	29.1	27.1	27.1	23.3	17.4	13.6	11.6	9.7	7.8	9.7
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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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

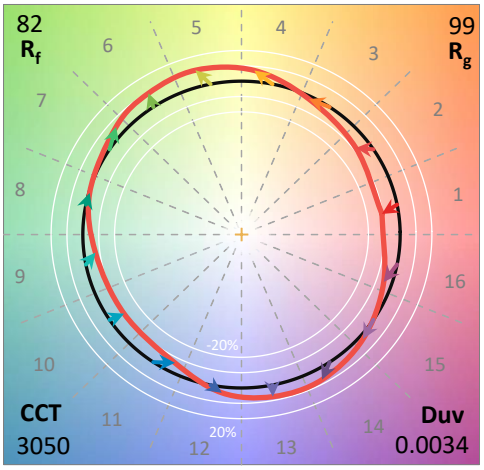
Test Information

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

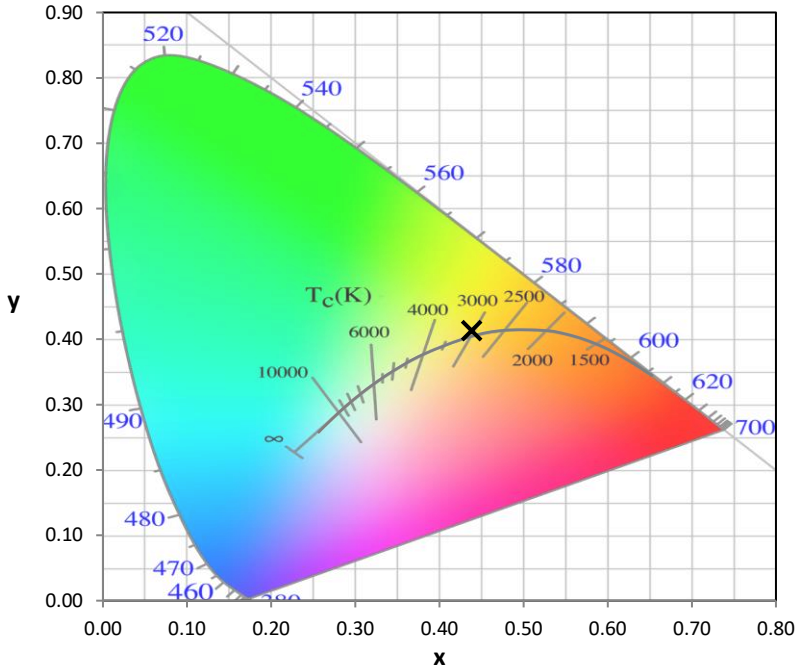
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

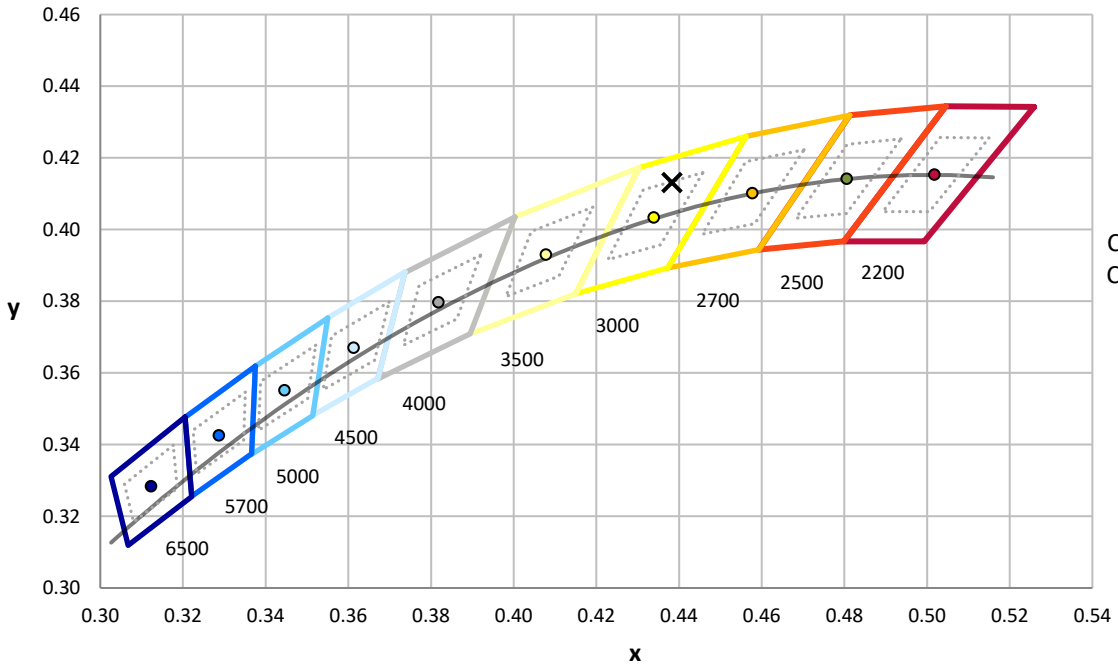
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

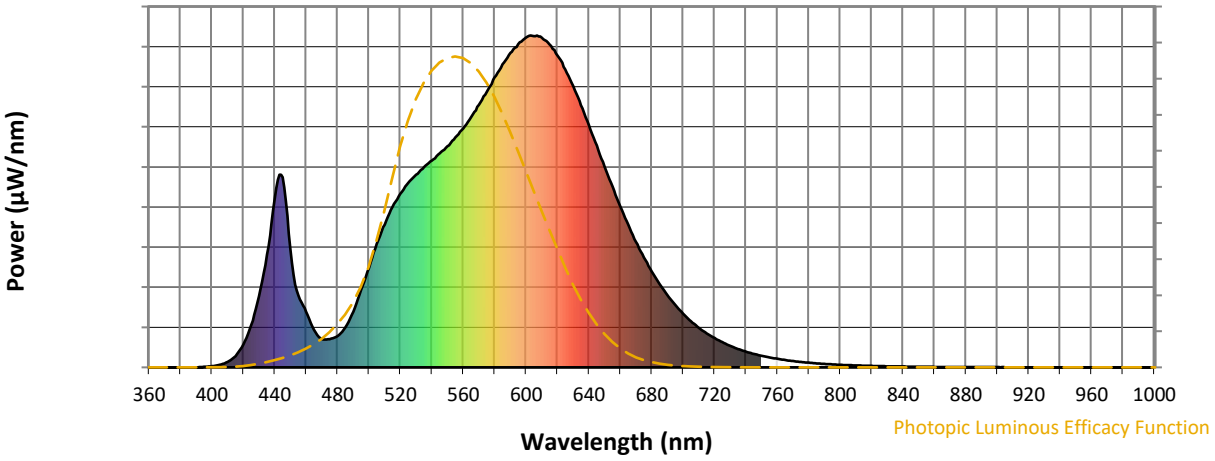


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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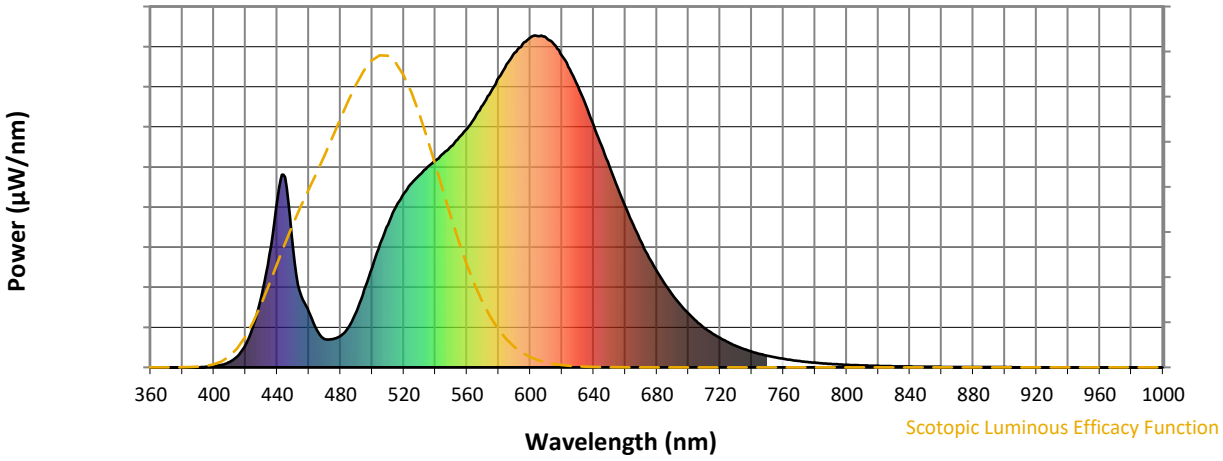
Scotopic Flux vs. Wavelength



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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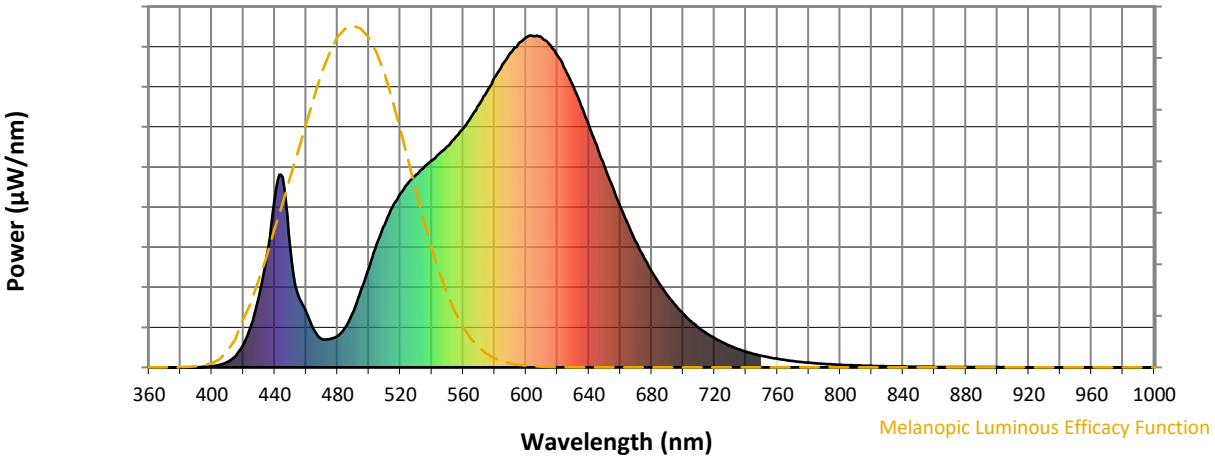
Melanopic Flux vs. Wavelength



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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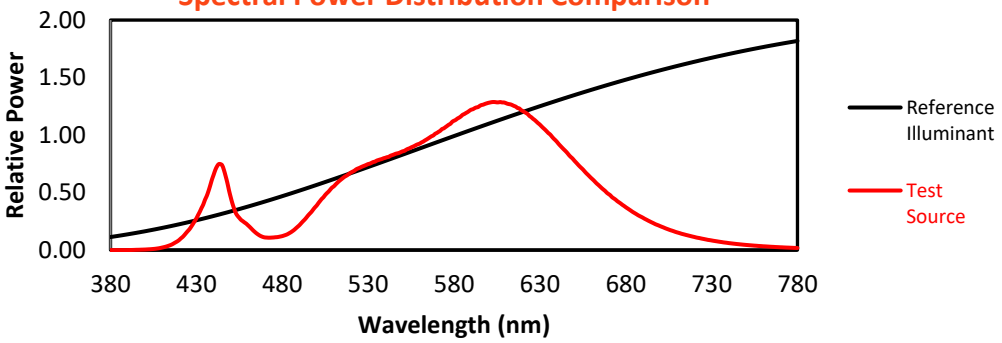
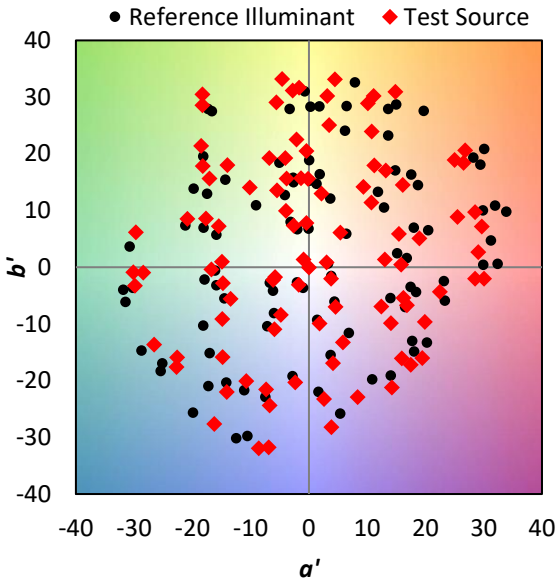
Summary

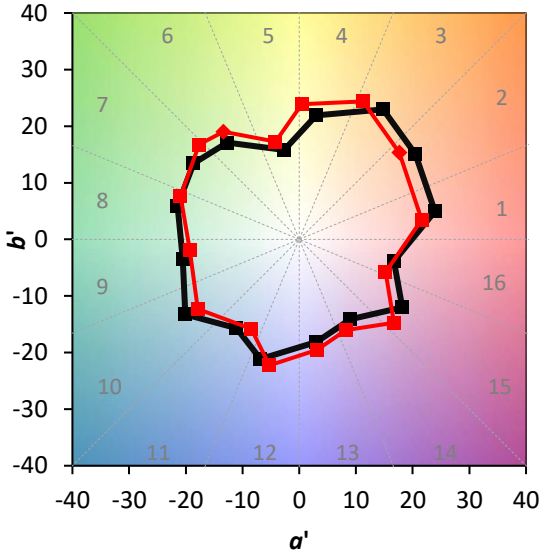
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

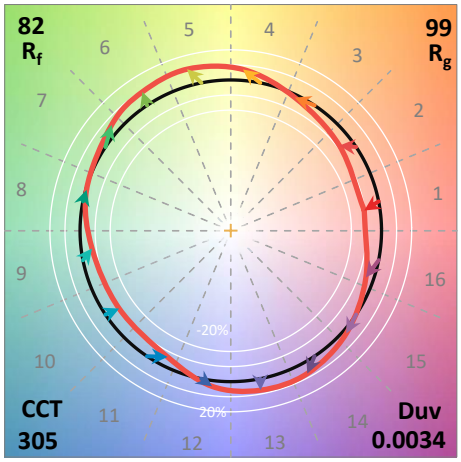
Spectral Power Distribution Comparison

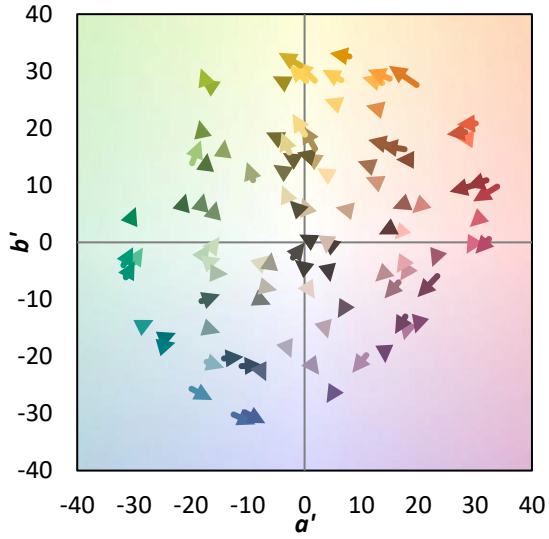


Color Vector Graphics









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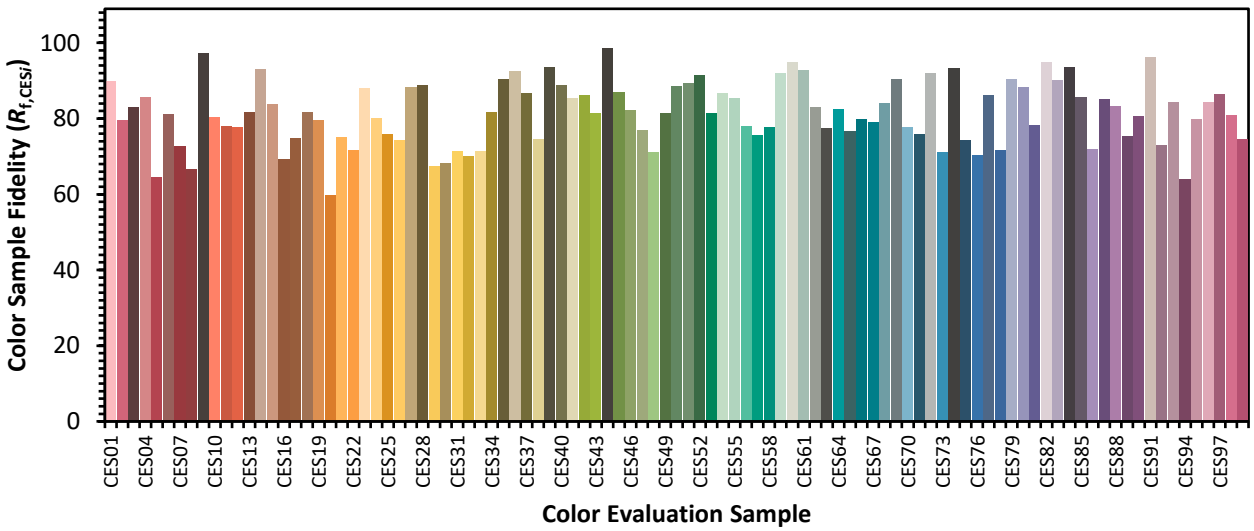
Individual Sample Fidelity Index ($R_{f,i}$)

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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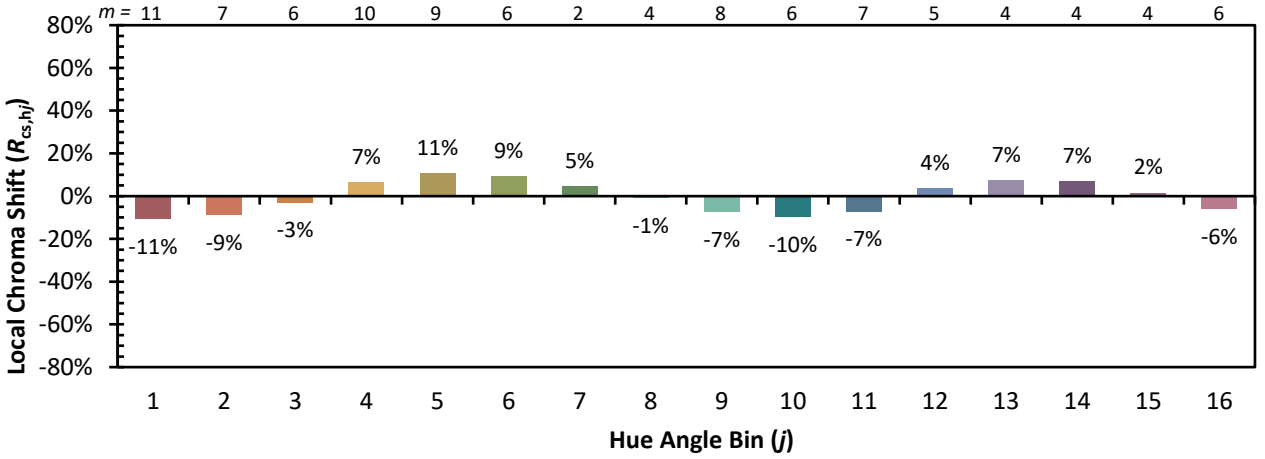
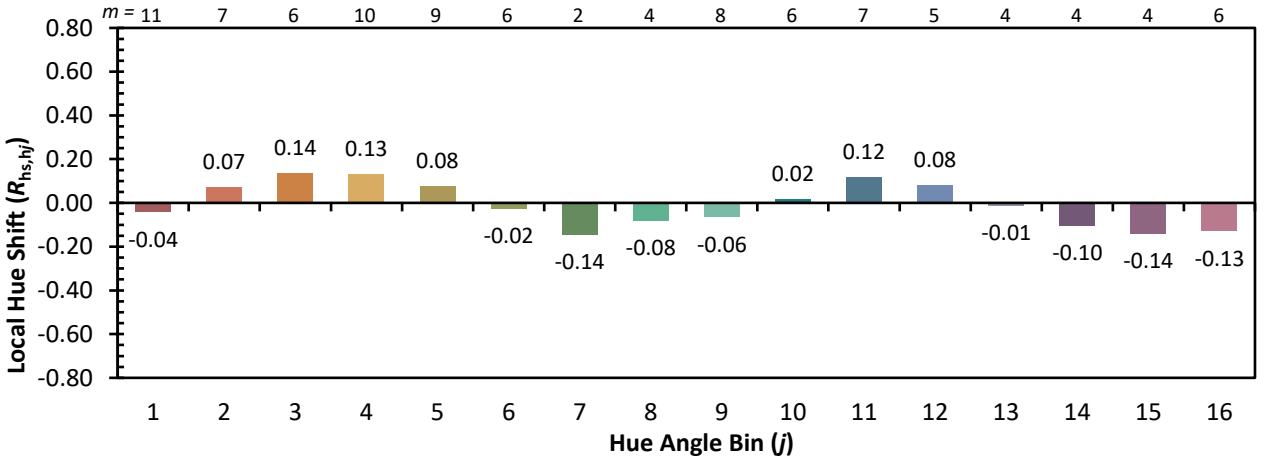
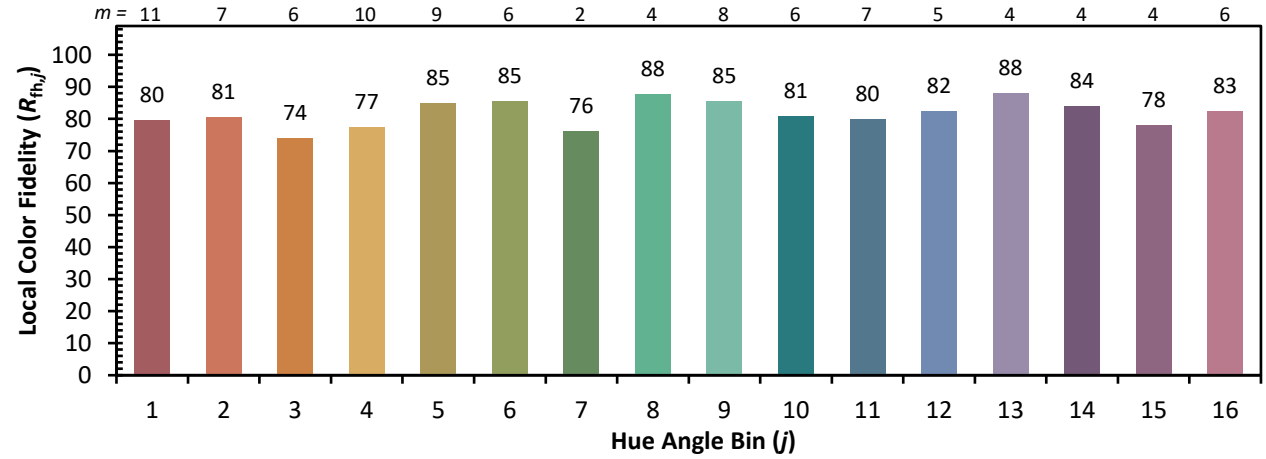
Color Rendition by Hue-Angle Bin







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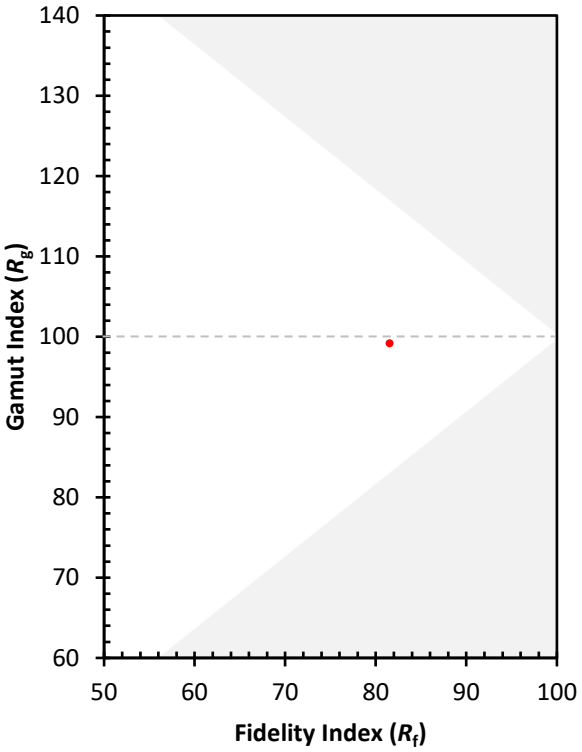
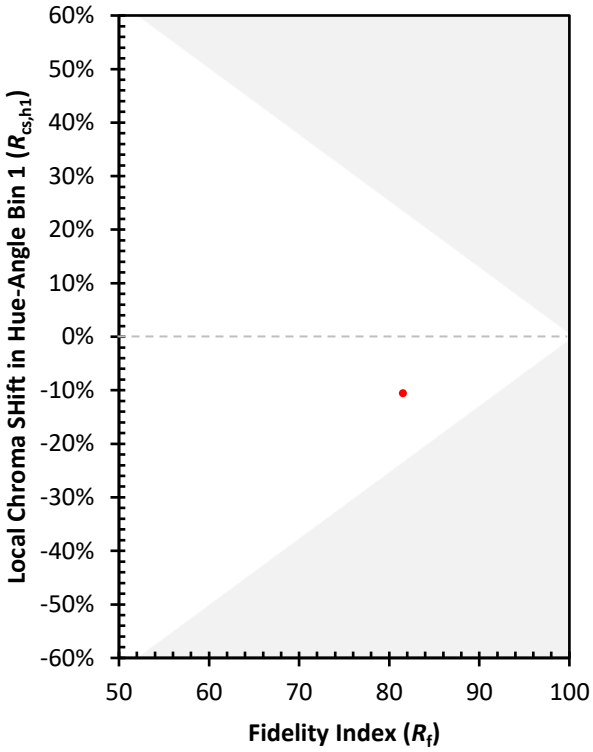
Measure Comparisons





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