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: P638478

Luminaire Tested: GWS-SA4E-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:	P638478
	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-SA4E-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:	23347.5 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:	B2 - U0 - G4

Input Watts (W):	202.6
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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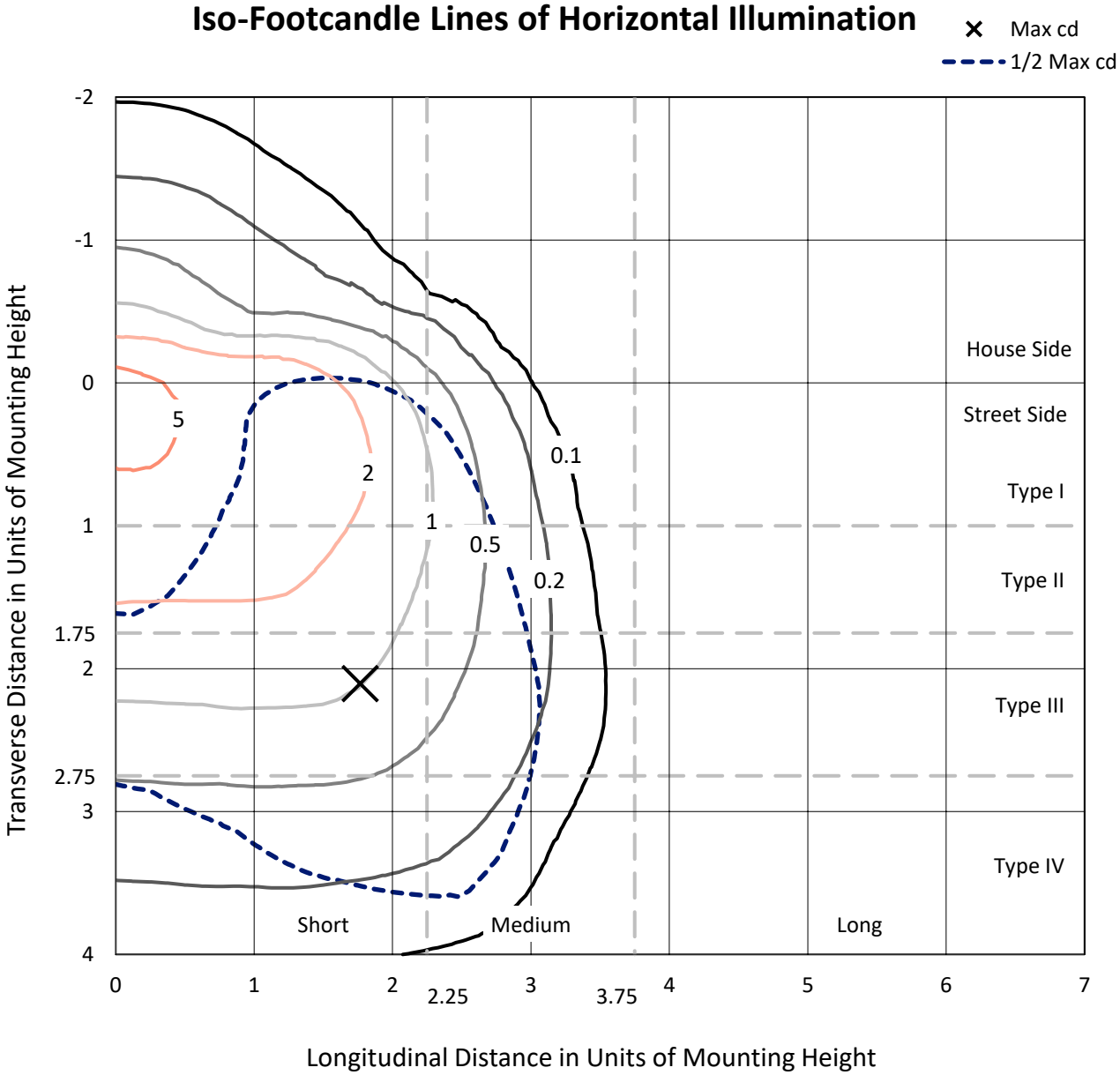
Scaled Data Report

REPORT NUMBER: P638478
CATALOG NUMBER: GWS-SA4E-830-U-SL4-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
Type IV - Short - N/A

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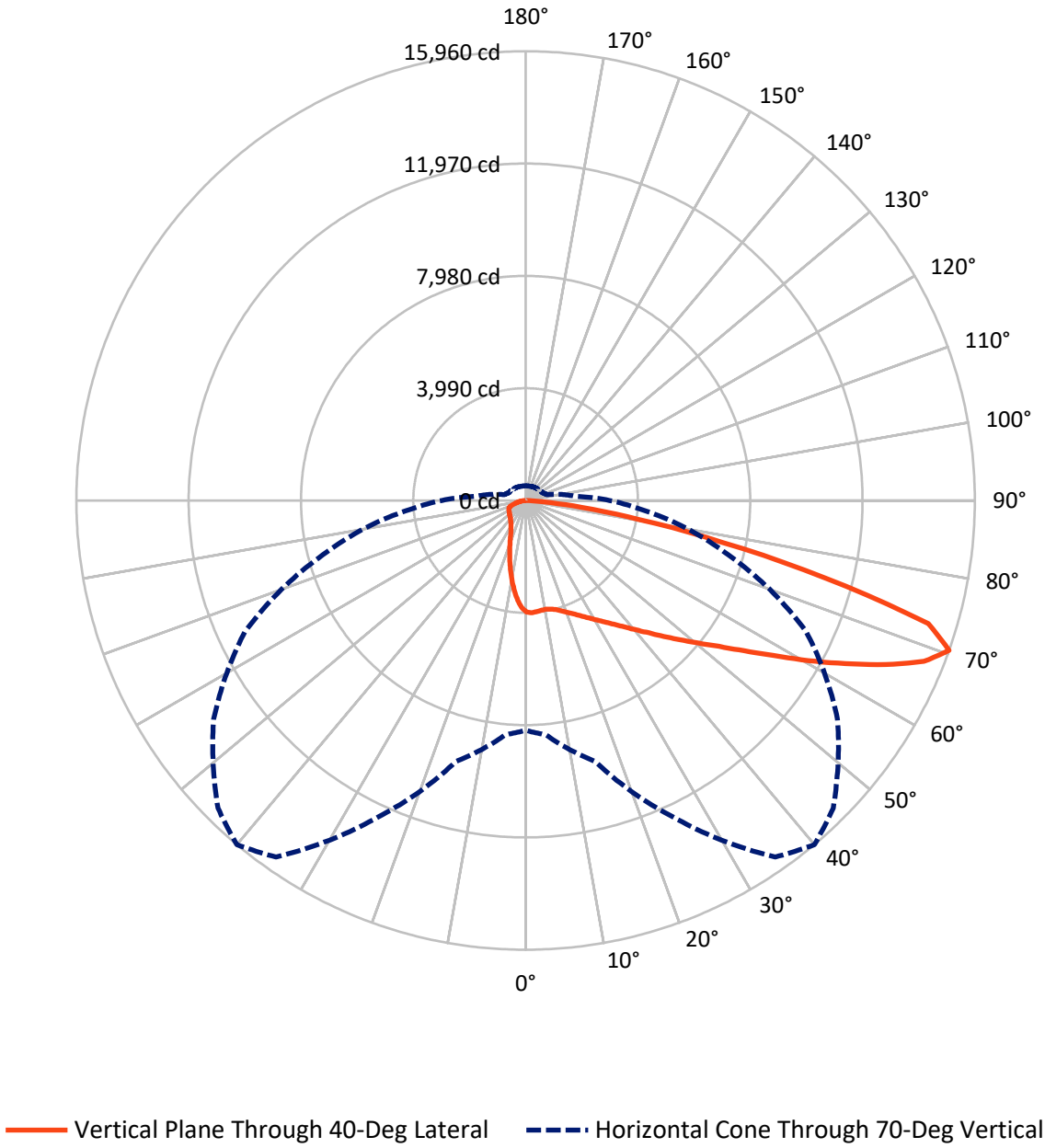
Luminous Intensity Polar Plot



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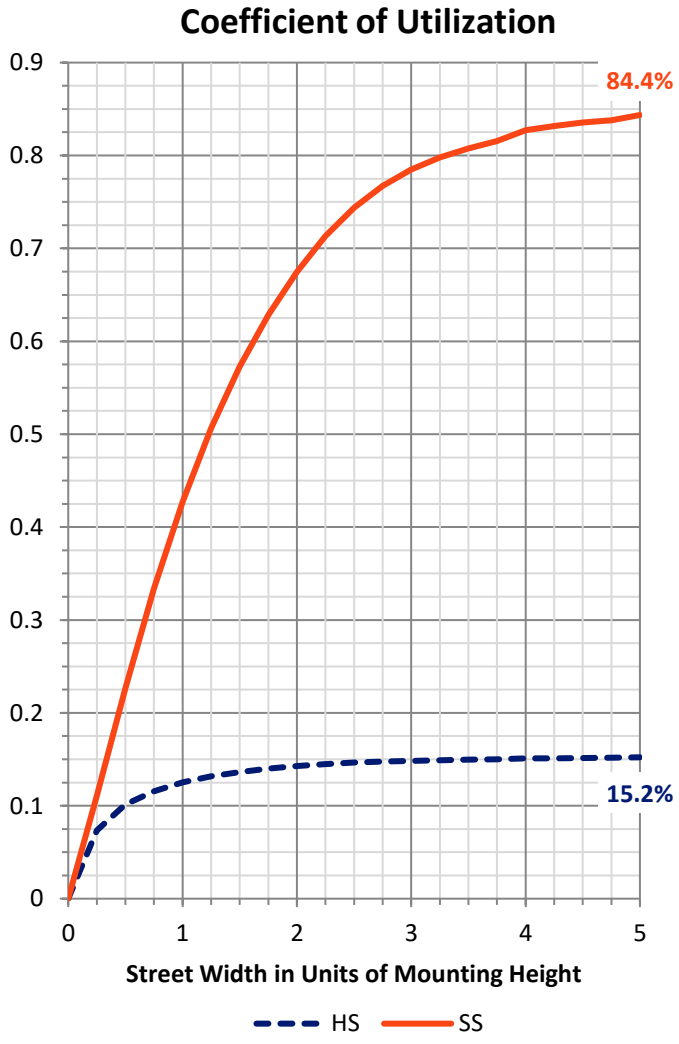
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3596.1	0.0	3596.1
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	19751.4	0.0	19751.4
	% Fixture	84.6	0.0	84.6
Total	Lumens	23347.5	0.0	23347.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.2	1.5
10°-20°	912.9	3.9
20°-30°	1433.5	6.1
30°-40°	2155.3	9.2
40°-50°	3326.7	14.2
50°-60°	4940.5	21.2
60°-70°	6227.4	26.7
70°-80°	3601.3	15.4
80°-90°	399.7	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°	23347.5	100.0
0°-180°	23347.5	100.0



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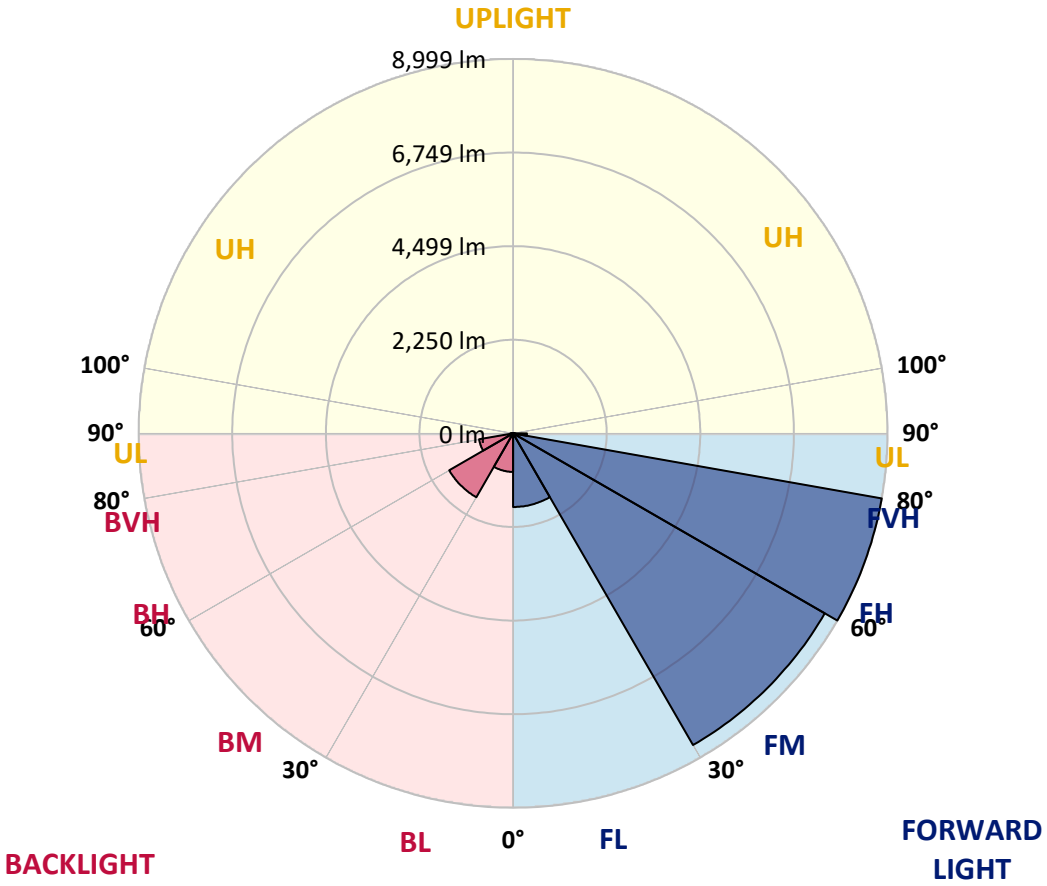
REPORT NUMBER: P638478
CATALOG NUMBER: GWS-SA4E-830-U-SL4-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1769.9	7.6			
FM	(30°-60°)	8649.9	37.0			
FH	(60°-80°)	8998.7	38.5			G4/12000
FVH	(80°-90°)	332.9	1.4			G3/500
BL	(0°-30°)	926.8	4.0	B2/1000		
BM	(30°-60°)	1772.6	7.6	B2/2500		
BH	(60°-80°)	830.0	3.6	B2/1000		G2/1000
BVH	(80°-90°)	66.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
Type IV Short



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REPORT NUMBER: P638478
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3964.7	3964.7	3964.7	3964.7	3964.7	*3964.7*	3964.7	3964.7	3964.7	3964.7	3964.7
2.5°	3989.1	3996.0	4001.3	4008.2	4004.8	*3994.3*	4003.0	4003.0	3983.8	3962.9	3943.8
5°	3994.3	4003.0	4001.3	3999.5	3985.6	*3968.2*	3968.2	3957.7	3924.6	3891.5	3860.1
7.5°	3983.8	3982.1	3980.4	3975.1	3959.4	*3940.3*	3936.8	3915.9	3872.3	3827.0	3781.7
10°	3936.8	3935.0	3940.3	3952.5	3949.0	*3931.6*	3931.6	3912.4	3861.9	3806.1	3746.8
12.5°	3898.5	3898.5	3919.4	3952.5	3964.7	*3957.7*	3959.4	3945.5	3888.0	3821.8	3752.1
15°	3903.7	3905.4	3950.7	4004.8	4027.4	*4022.2*	4023.9	4008.2	3943.8	3877.5	3783.4
17.5°	3938.5	3947.2	4025.7	4100.6	4130.2	*4123.3*	4111.1	4084.9	4011.7	3936.8	3821.8
20°	4011.7	4025.7	4126.7	4220.9	4255.7	*4240.0*	4219.1	4166.8	4086.7	4004.8	3863.6
22.5°	4156.4	4165.1	4276.6	4369.0	4396.9	*4377.7*	4335.9	4260.9	4168.6	4083.2	3914.1
25°	4360.3	4370.7	4477.0	4562.4	4555.5	*4532.8*	4475.3	4382.9	4273.1	4182.5	3987.3
27.5°	4602.5	4619.9	4724.5	4792.5	4747.2	*4714.0*	4649.6	4538.0	4414.3	4332.4	4098.9
30°	4867.4	4874.4	4963.2	5031.2	4961.5	*4916.2*	4837.8	4717.5	4606.0	4545.0	4266.2
32.5°	5123.6	5130.5	5207.2	5245.6	5172.4	*5139.3*	5071.3	4944.1	4865.7	4832.5	4515.4
35°	5393.7	5392.0	5454.7	5487.8	5412.9	*5398.9*	5329.2	5231.6	5217.7	5261.3	4879.6
37.5°	5663.8	5648.1	5681.2	5724.8	5683.0	*5696.9*	5651.6	5618.5	5672.5	5785.8	5364.1
40°	5879.9	5879.9	5914.8	5968.8	5982.7	*6043.7*	6017.6	6061.2	6235.4	6505.5	5963.6
42.5°	6071.6	6073.4	6146.6	6230.2	6331.3	*6425.4*	6446.3	6559.6	6920.3	7343.8	6716.4
45°	6272.0	6273.8	6373.1	6495.1	6709.4	*6888.9*	6930.8	7185.2	7701.1	8216.9	7533.8
47.5°	6503.8	6484.6	6622.3	6826.2	7131.2	*7389.1*	7497.2	7857.9	8509.7	9144.0	8304.0
50°	6765.2	6725.1	6878.5	7230.5	7606.9	*7960.7*	8142.0	8555.0	9377.5	9999.7	9029.0
52.5°	7059.7	7037.1	7197.4	7626.1	8201.2	*8609.0*	8854.7	9396.7	10221.0	10851.9	9604.1
55°	7425.7	7371.7	7603.5	8148.9	8898.3	*9417.6*	9708.7	10229.7	11142.9	11625.6	10043.3
57.5°	7826.5	7767.3	8077.5	8802.4	9804.5	*10374.4*	10738.6	11167.3	12010.8	12218.2	10301.2
60°	8258.7	8239.5	8607.3	9569.2	10885.0	*11547.2*	11810.4	12199.0	12765.4	12561.5	10236.7
62.5°	8654.3	8647.3	9182.4	10400.5	12030.0	*12758.4*	12967.5	13070.4	13309.1	12538.8	9724.3
65°	9070.8	9130.1	9853.3	11364.2	13342.2	*14056.7*	14143.9	13882.5	13492.1	11944.6	8675.2
67.5°	9123.1	9238.1	10275.0	12267.0	14586.5	*15260.9*	15191.2	14190.9	12951.8	10290.7	6800.1
70°	*8159.4*	*8359.8*	*9602.4*	*12404.6*	*15463.1*	*15959.8*	*15456.1*	*13526.9*	*10991.3*	*7455.3*	*4276.6*
72.5°	6817.5	6990.0	8087.9	10578.3	14332.1	*14964.7*	14283.3	11449.6	7767.3	4276.6	2178.4
75°	5306.6	5507.0	6519.5	8408.6	10729.9	*10982.6*	10641.0	7985.1	4269.6	1763.6	989.9
77.5°	3238.0	3382.6	4170.3	5696.9	7507.6	*7129.4*	6042.0	4477.0	1873.4	845.2	611.7
80°	1432.5	1521.4	2054.7	3060.2	4337.6	*4100.6*	3232.7	1911.8	1024.7	536.8	427.0
82.5°	768.5	826.0	1012.5	1211.2	1904.8	*1991.9*	1615.5	1101.4	550.7	306.7	244.0
85°	338.1	371.2	460.1	439.2	625.6	*615.2*	620.4	756.3	263.1	141.2	158.6
87.5°	0.0	0.0	0.0	0.0	1.7	*1.7*	19.2	101.1	26.1	41.8	36.6
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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Scaled Data Report

REPORT NUMBER: P638478
CATALOG NUMBER: GWS-SA4E-830-U-SL4-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3964.7	3964.7	3964.7	3964.7	3964.7	3964.7	3964.7	3964.7	3964.7	3964.7	3964.7
2.5°	3922.8	3891.5	3882.8	3872.3	3853.1	3820.0	3795.6	3767.7	3755.5	3741.6	3743.3
5°	3825.3	3786.9	3750.3	3703.3	3644.0	3577.8	3532.5	3480.2	3452.3	3426.2	3433.1
7.5°	3741.6	3682.4	3607.4	3508.1	3401.8	3283.3	3187.4	3112.5	3061.9	3027.1	3044.5
10°	3689.3	3619.6	3488.9	3326.8	3147.3	2966.1	2828.4	2699.5	2619.3	2556.6	2553.1
12.5°	3678.9	3588.2	3398.3	3163.0	2903.4	2661.1	2459.0	2284.7	2178.4	2100.0	2129.6
15°	3689.3	3574.3	3319.9	3011.4	2683.8	2356.1	2105.2	1904.8	1777.6	1706.1	1700.9
17.5°	3701.5	3560.4	3231.0	2847.6	2453.7	2079.1	1788.0	1575.4	1444.7	1373.3	1375.0
20°	3712.0	3539.5	3126.4	2668.1	2220.2	1821.1	1519.6	1317.5	1200.7	1148.4	1157.2
22.5°	3729.4	3518.5	3014.9	2476.4	1981.5	1571.9	1307.0	1143.2	1073.5	1038.7	1040.4
25°	3762.5	3506.3	2899.9	2267.3	1746.2	1373.3	1160.6	1050.9	1007.3	986.4	984.6
27.5°	3830.5	3516.8	2779.6	2065.1	1533.6	1221.6	1066.5	995.1	965.5	951.5	949.8
30°	3943.8	3558.6	2675.1	1859.5	1350.6	1103.1	1002.1	958.5	941.1	928.9	927.1
32.5°	4116.3	3637.0	2561.8	1667.8	1202.5	1016.0	951.5	928.9	916.7	909.7	909.7
35°	4377.7	3779.9	2450.3	1500.5	1087.5	948.0	911.4	902.7	892.3	888.8	892.3
37.5°	4754.1	4008.2	2349.2	1354.1	1005.5	895.8	867.9	871.4	862.6	867.9	873.1
40°	5231.6	4313.2	2263.8	1233.8	944.6	857.4	829.5	841.7	836.5	841.7	850.4
42.5°	5836.3	4691.4	2199.3	1139.7	901.0	826.0	799.9	812.1	808.6	815.6	824.3
45°	6510.8	5189.8	2169.7	1073.5	869.6	803.4	775.5	784.2	780.7	786.0	794.7
47.5°	7157.3	5642.9	2195.8	1035.2	843.5	784.2	754.6	758.1	756.3	754.6	759.8
50°	7715.0	6003.6	2270.8	1023.0	826.0	765.1	737.2	738.9	733.7	723.2	726.7
52.5°	8169.8	6292.9	2316.1	1023.0	817.3	744.1	718.0	719.7	709.3	695.3	697.1
55°	8469.6	6409.7	2279.5	1021.2	813.8	726.7	698.8	700.6	690.1	672.7	674.4
57.5°	8555.0	6296.4	2126.1	1002.1	810.4	712.8	679.7	683.1	676.2	657.0	657.0
60°	8316.2	5881.7	1845.5	958.5	801.6	704.1	665.7	670.9	667.5	648.3	648.3
62.5°	7690.6	5144.5	1510.9	892.3	777.3	693.6	653.5	664.0	672.7	662.2	660.5
65°	6519.5	4121.5	1228.6	819.1	745.9	676.2	636.1	662.2	681.4	695.3	695.3
67.5°	4891.8	2950.4	1002.1	742.4	698.8	641.3	613.4	637.8	651.8	660.5	665.7
70°	*2981.8*	*1735.7*	*789.4*	*653.5*	*630.9*	*589.0*	*568.1*	*543.7*	*524.6*	*521.1*	*522.8*
72.5°	1458.7	993.3	641.3	555.9	538.5	500.2	453.1	442.6	433.9	428.7	427.0
75°	803.4	691.9	529.8	461.8	430.5	383.4	372.9	355.5	352.0	345.1	346.8
77.5°	568.1	545.5	437.4	374.7	327.6	303.2	308.5	296.3	296.3	291.0	289.3
80°	427.0	428.7	336.3	273.6	242.2	233.5	238.8	238.8	235.3	233.5	231.8
82.5°	270.1	305.0	226.6	176.0	172.5	174.3	172.5	170.8	174.3	169.0	167.3
85°	186.5	219.6	137.7	104.6	104.6	102.8	106.3	104.6	108.0	102.8	102.8
87.5°	41.8	97.6	50.5	31.4	33.1	31.4	33.1	34.9	38.3	40.1	40.1
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

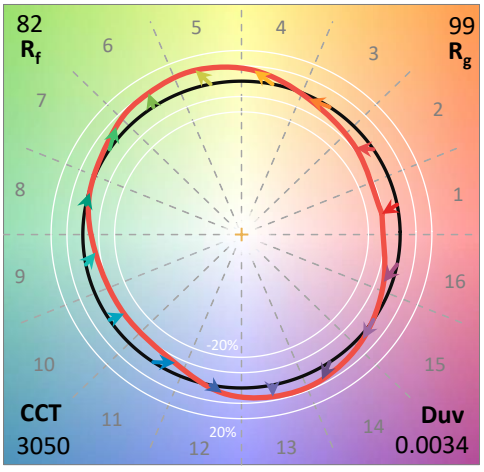
Test Information

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

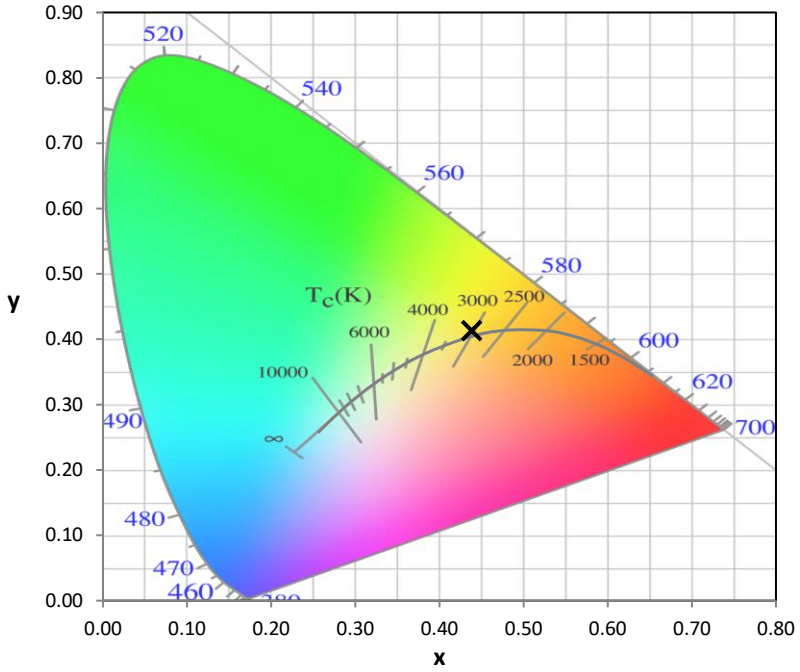
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

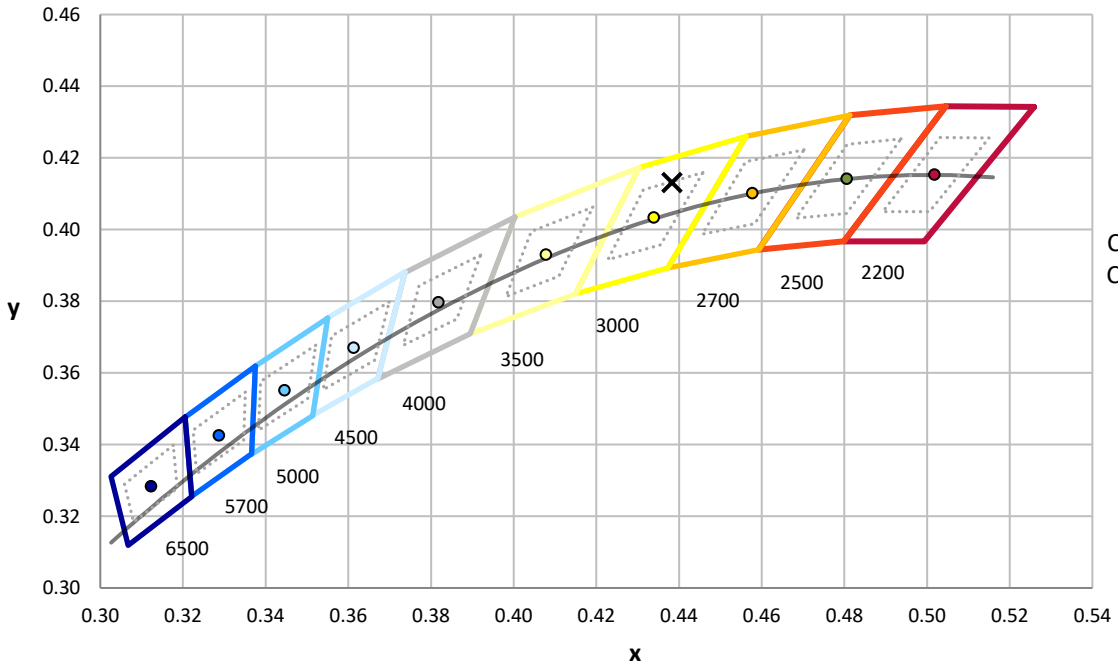
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

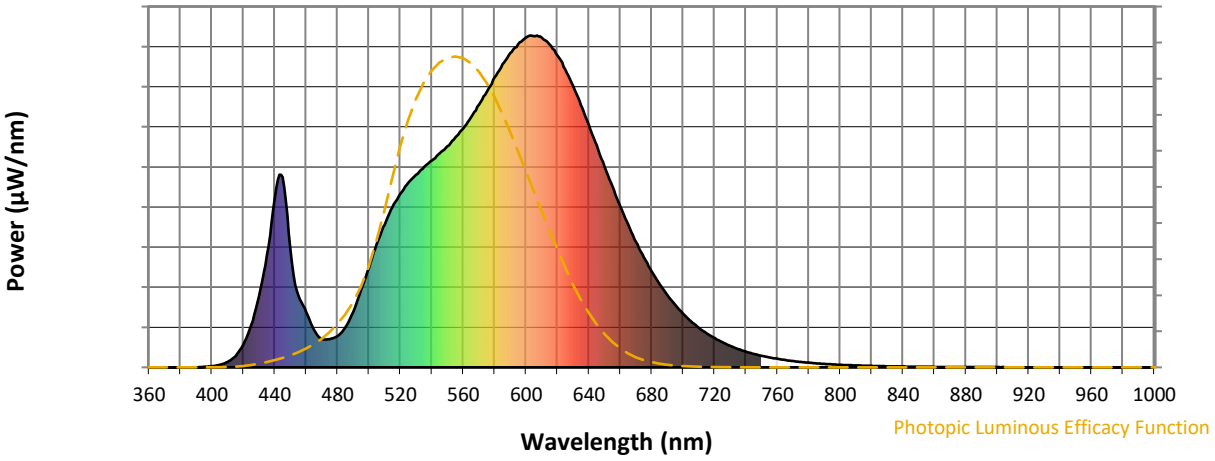


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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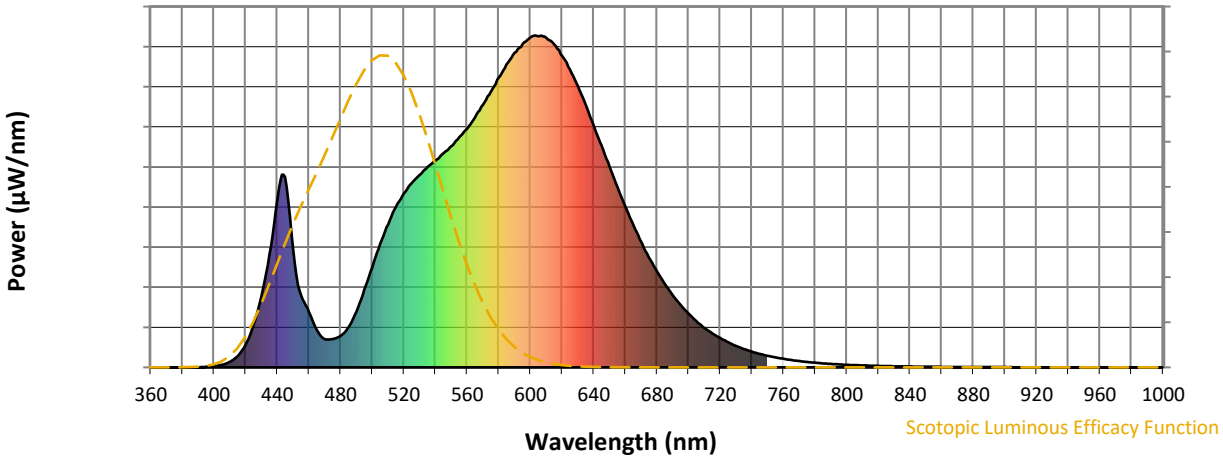
Scotopic Flux vs. Wavelength



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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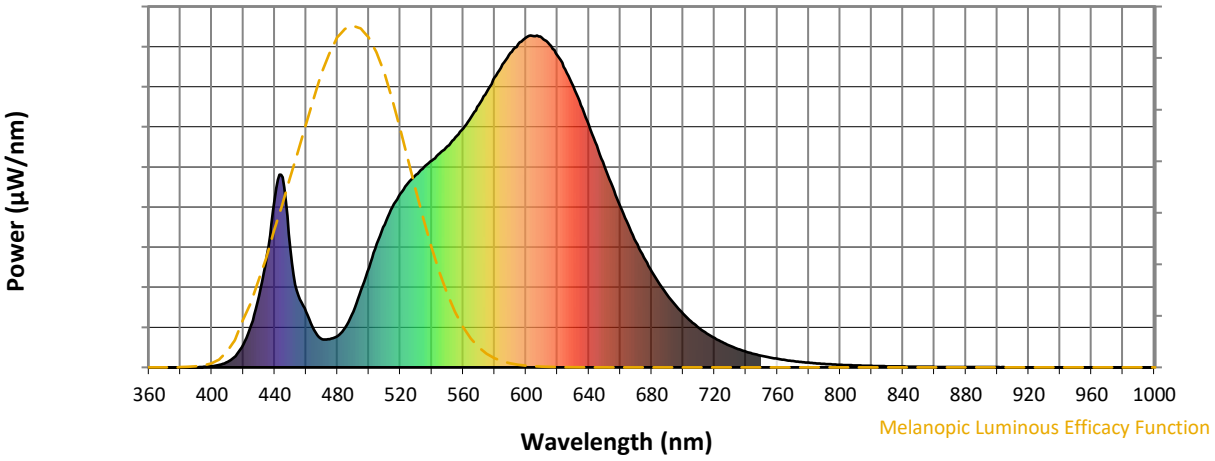
Melanopic Flux vs. Wavelength



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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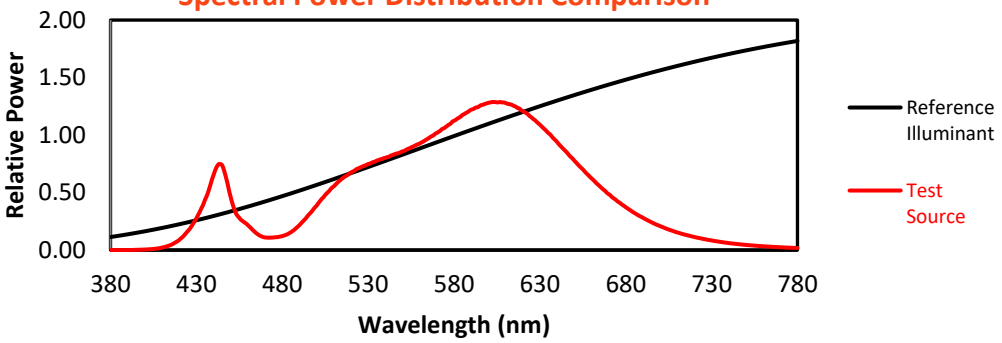
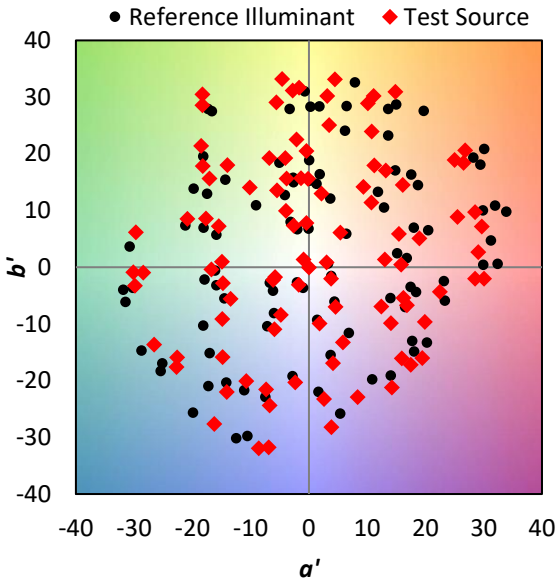
Summary

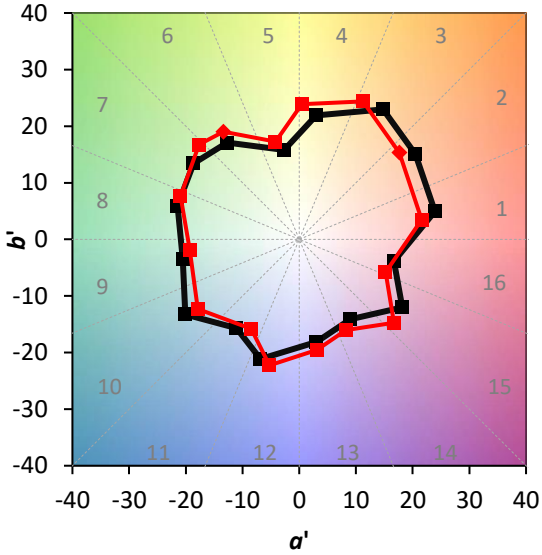
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

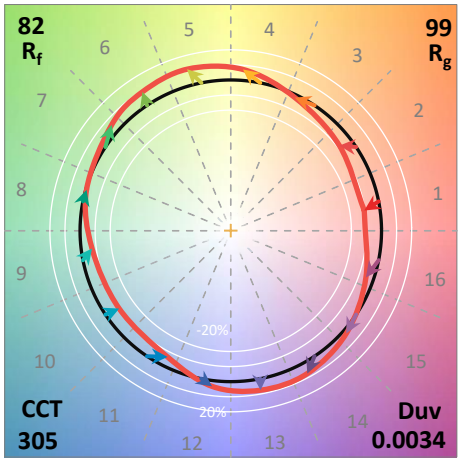
Spectral Power Distribution Comparison

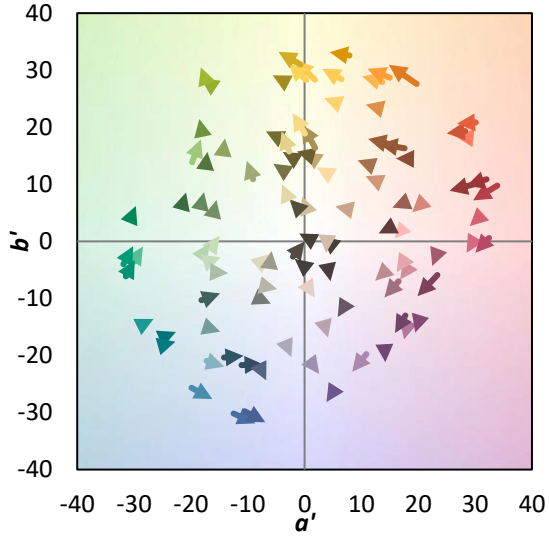


Color Vector Graphics









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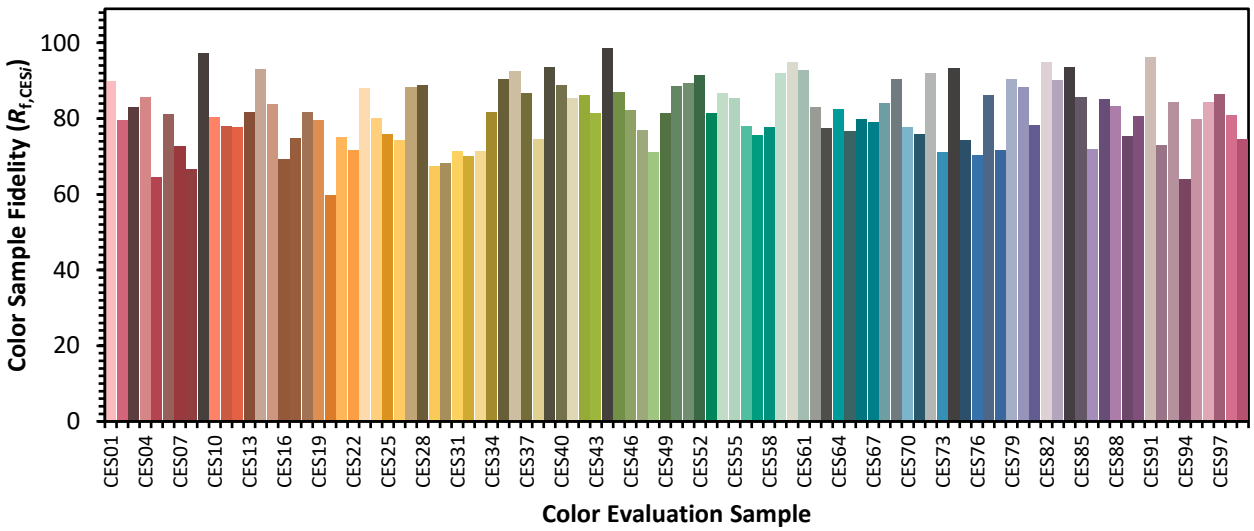
Individual Sample Fidelity Index ($R_{f,i}$)

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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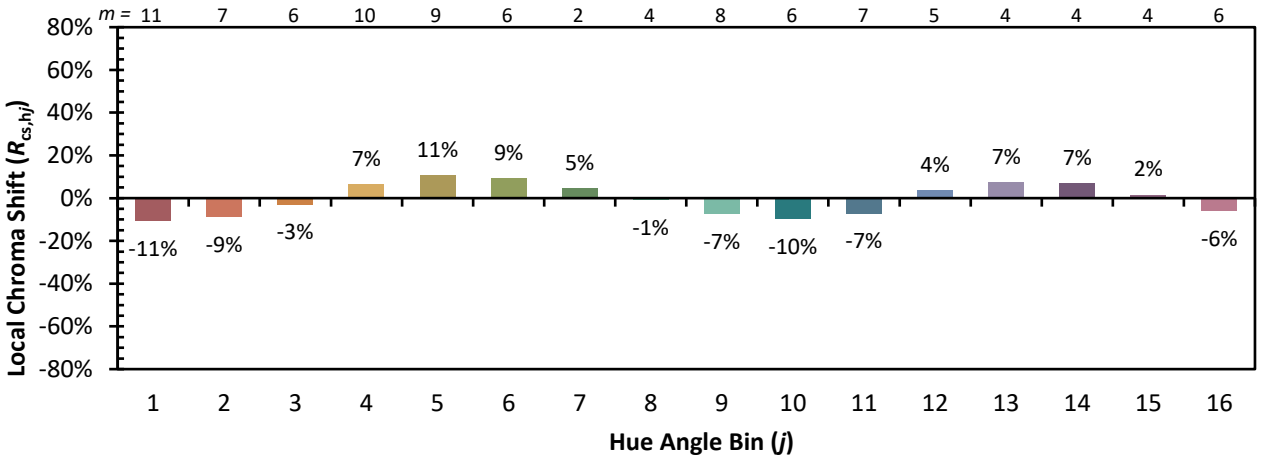
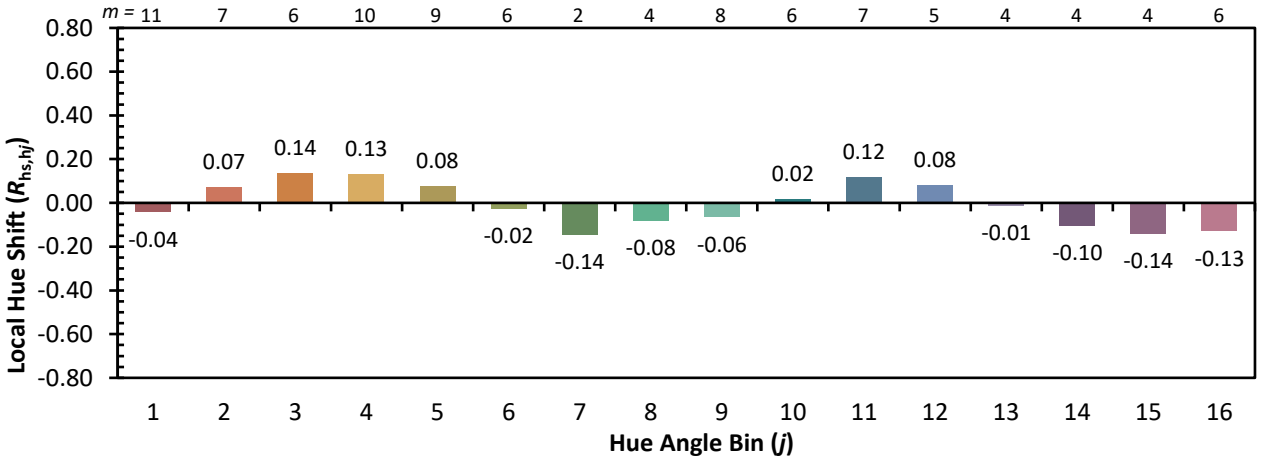
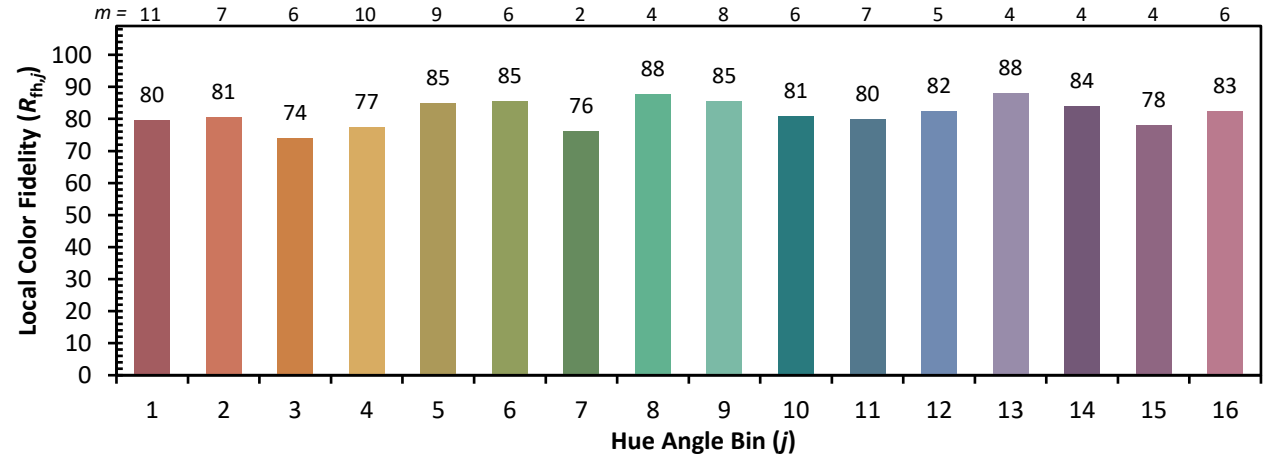
Color Rendition by Hue-Angle Bin







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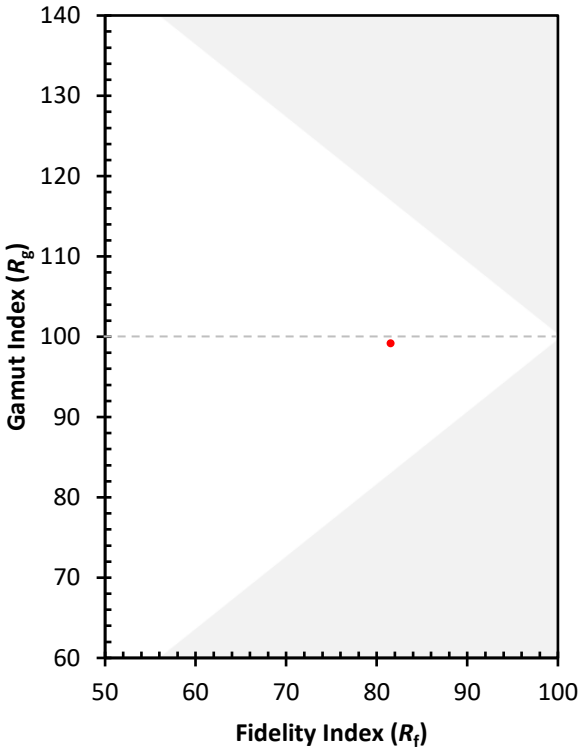
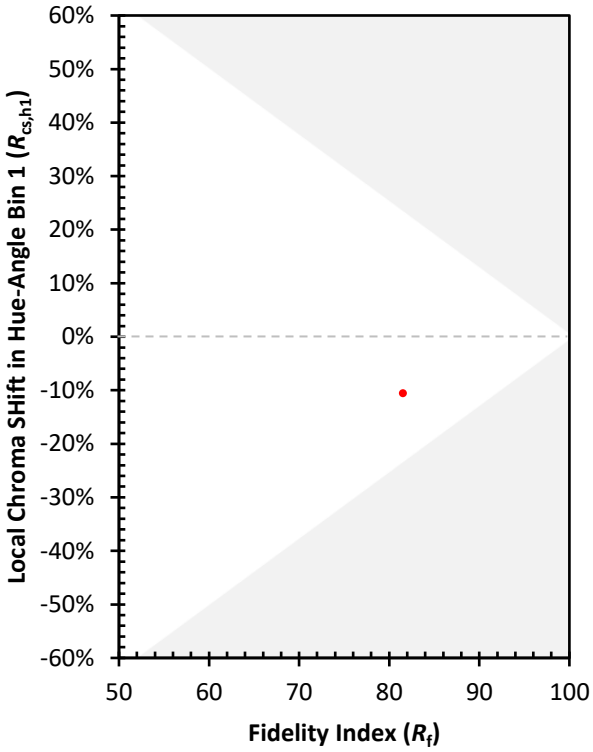
Measure Comparisons





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