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: P641459

Luminaire Tested: GWS-SA5F-830-U-T2-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:	P641459
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-21)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5F-830-U-T2-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSLLED GLARE SHIELD, WH
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	27643.3 lumens
Efficiency:	N/A
Efficacy:	89.1 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

Input Watts (W):	310.3
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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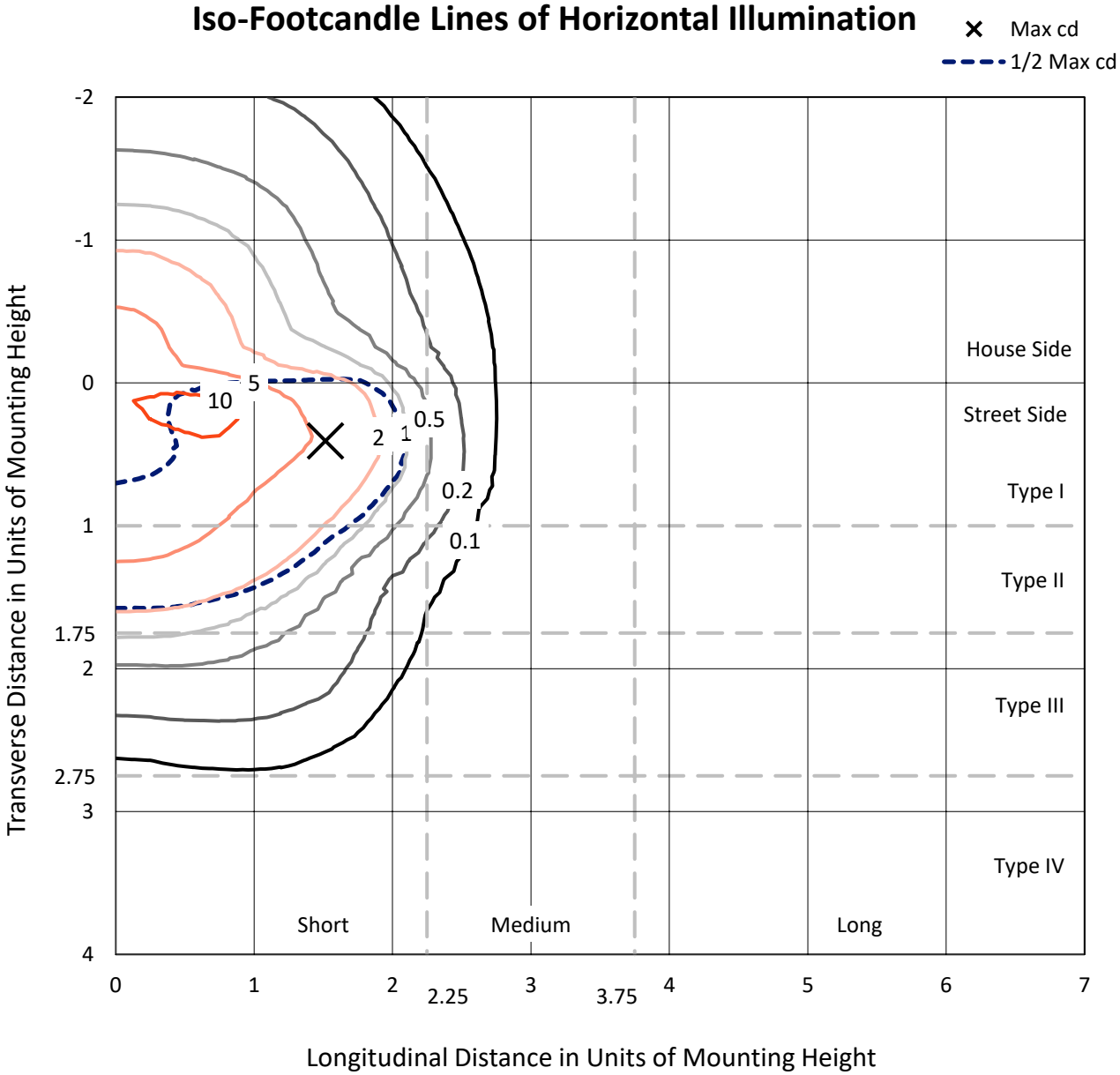
REPORT NUMBER: P641459
CATALOG NUMBER: GWS-SA5F-830-U-T2-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
Type II - Short - N/A

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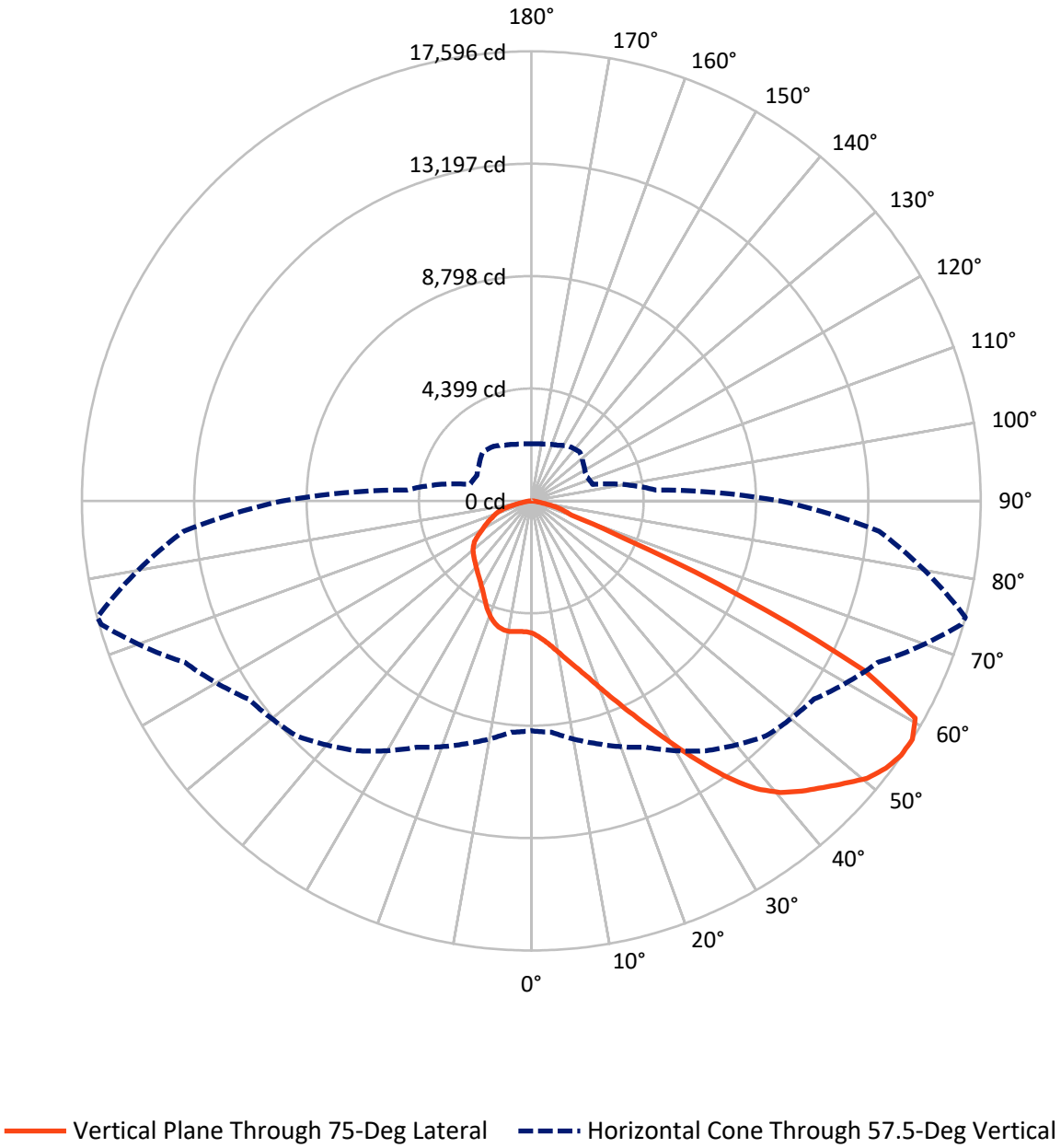
Luminous Intensity Polar Plot



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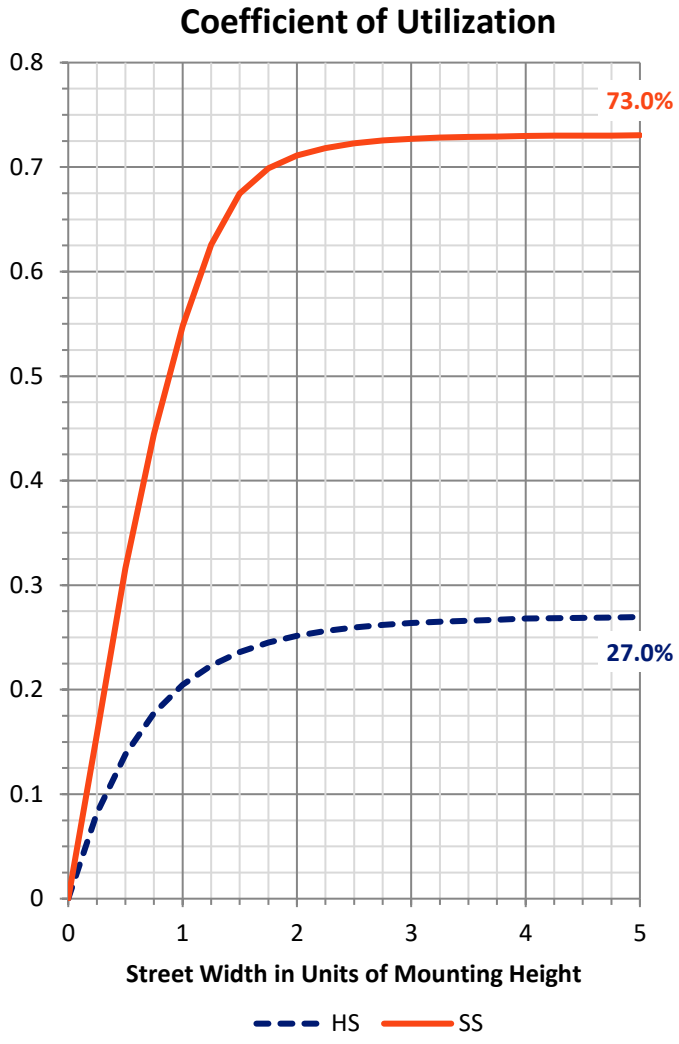
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7478.1	0.0	7478.1
	% Fixture	27.1	0.0	27.1
Street Side	Lumens	20165.2	0.0	20165.2
	% Fixture	72.9	0.0	72.9
Total	Lumens	27643.3	0.0	27643.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.0	1.9
10°-20°	1649.4	6.0
20°-30°	2925.1	10.6
30°-40°	4477.9	16.2
40°-50°	6235.0	22.6
50°-60°	7144.1	25.8
60°-70°	3670.8	13.3
70°-80°	924.2	3.3
80°-90°	98.8	0.4
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°	27643.3	100.0
0°-180°	27643.3	100.0



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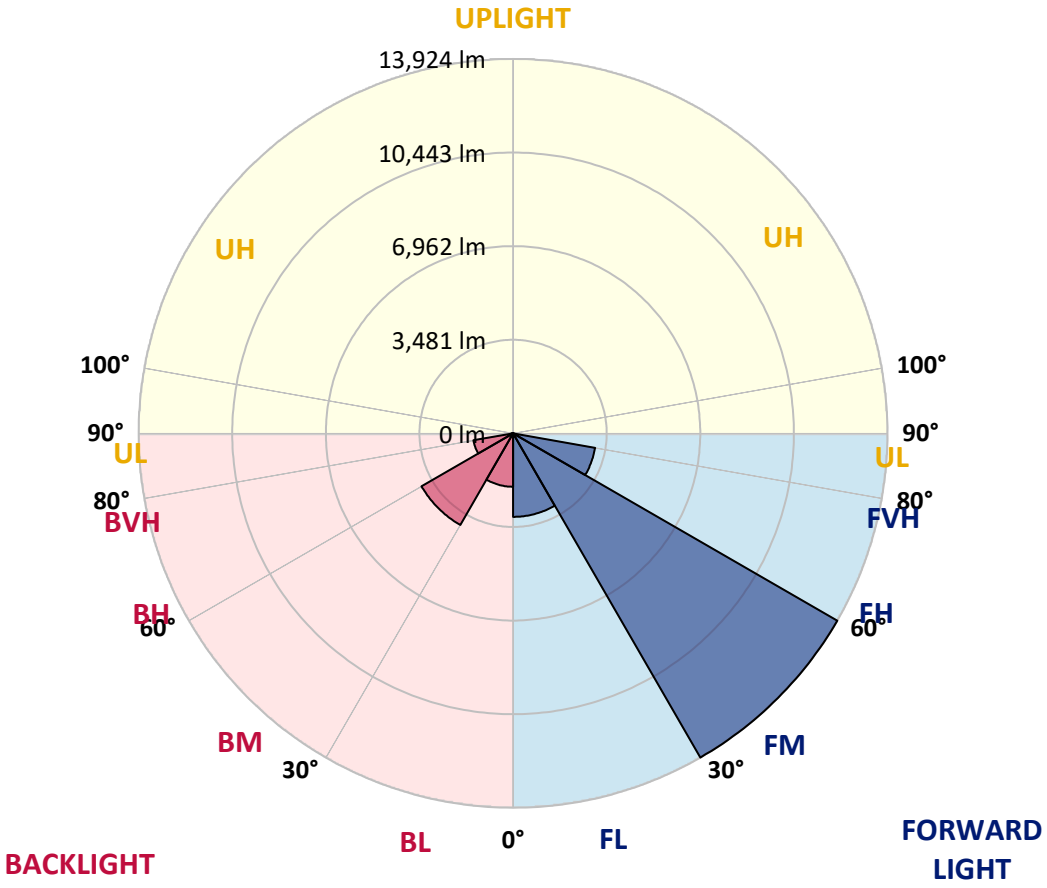
REPORT NUMBER: P641459
CATALOG NUMBER: GWS-SA5F-830-U-T2-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	3105.9	11.2			
FM	(30°-60°)	13924.2	50.4			
FH	(60°-80°)	3098.5	11.2			G2/5000
FVH	(80°-90°)	36.6	0.1			G1/100
BL	(0°-30°)	1986.6	7.2	B3/2500		
BM	(30°-60°)	3932.8	14.2	B3/5000		
BH	(60°-80°)	1496.4	5.4	B3/2500		G3/2500
BVH	(80°-90°)	62.2	0.2			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 II Short



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Scaled Data Report

REPORT NUMBER: P641459
CATALOG NUMBER: GWS-SA5F-830-U-T2-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	5176.9	5176.9	5176.9	5176.9	5176.9	5176.9	5176.9	5176.9	5176.9	*5176.9*	5176.9
2.5°	5562.0	5576.2	5562.0	5585.8	5538.2	5516.8	5464.5	5386.1	5324.3	*5314.8*	5245.9
5°	5994.6	6025.5	6006.5	5997.0	5932.8	5885.2	5806.8	5649.9	5521.6	*5502.6*	5367.1
7.5°	6272.7	6294.1	6294.1	6301.2	6277.4	6222.8	6139.6	5954.2	5773.5	*5745.0*	5540.6
10°	6365.4	6382.0	6412.9	6472.3	6519.9	6536.5	6481.9	6303.6	6082.5	*6054.0*	5768.8
12.5°	6386.8	6405.8	6453.3	6562.7	6693.4	6812.2	6821.8	6691.0	6443.8	*6412.9*	6032.6
15°	6427.2	6446.2	6510.4	6645.9	6838.4	7066.6	7206.8	7116.5	6843.1	*6809.9*	6332.1
17.5°	6422.4	6443.8	6538.9	6719.5	6978.6	7309.0	7580.0	7618.0	7335.2	*7278.1*	6672.0
20°	6410.5	6429.6	6531.8	6752.8	7073.7	7527.7	8017.3	8214.6	7910.4	*7858.1*	7069.0
22.5°	6505.6	6527.0	6605.5	6788.5	7123.6	7696.5	8421.4	8896.8	8592.6	*8518.9*	7525.3
25°	6719.5	6750.4	6798.0	6924.0	7213.9	7846.2	8835.0	9669.3	9357.9	*9270.0*	8022.1
27.5°	7049.9	7088.0	7154.5	7213.9	7416.0	8036.4	9246.2	10534.5	10223.1	*10130.4*	8547.4
30°	7454.0	7503.9	7589.5	7629.9	7767.8	8316.8	9693.1	11425.8	11245.2	*11116.8*	9139.2
32.5°	8012.6	8081.5	8162.3	8174.2	8257.4	8742.3	10135.2	12310.1	12307.7	*12217.4*	9811.9
35°	8739.9	8813.6	8830.2	8846.9	8887.3	9327.0	10670.0	13115.8	13427.2	*13322.6*	10544.0
37.5°	9533.8	9640.8	9666.9	9593.2	9650.3	10030.6	11271.3	13762.4	14401.7	*14290.0*	11252.3
40°	10382.4	10425.2	10496.5	10380.0	10451.3	10836.4	11860.8	14175.9	15129.1	*15010.2*	11810.9
42.5°	10990.9	11069.3	11176.3	11133.5	11173.9	11525.7	12274.4	14375.6	15647.2	*15528.4*	12212.6
45°	11651.6	11675.4	11744.3	11734.8	11758.6	12086.6	12571.5	14463.5	16110.7	*16003.8*	12554.9
47.5°	12226.9	12262.5	12307.7	12255.4	12203.1	12417.0	12814.0	14539.6	16645.6	*16517.2*	12913.8
50°	12780.7	12811.6	12866.3	12714.1	12519.2	12573.9	12932.8	14644.2	17147.1	*17056.8*	13196.6
52.5°	12882.9	12916.2	13172.9	13203.8	12954.2	12761.7	13142.0	14874.8	17441.8	*17384.8*	13298.9
55°	11597.0	11656.4	12167.4	12754.5	13370.2	13308.4	13477.1	14996.0	17558.3	*17572.6*	13481.9
57.5°	*9001.4*	*9087.0*	*9833.3*	*10639.1*	*11934.5*	*13006.5*	*13519.9*	*14965.1*	*17517.9*	*17596.3*	*13669.7*
60°	5904.3	5954.2	6838.4	7741.6	9084.6	10567.8	12100.9	14408.9	17159.0	*17270.7*	13622.1
62.5°	3565.4	3622.4	4333.1	5017.7	5809.2	6800.4	8207.5	11580.3	14382.7	*14632.3*	10910.1
65°	2488.6	2564.7	3187.4	3750.8	4024.1	3819.7	4157.2	6467.6	8961.0	*9065.6*	6667.3
67.5°	1804.1	1856.4	2367.4	3037.7	3339.6	2697.8	2056.0	2864.2	3902.9	*3940.9*	2750.1
70°	1181.3	1240.8	1704.2	2312.7	2726.3	2186.8	1537.9	1549.8	1642.5	*1661.5*	1597.3
72.5°	648.9	684.6	1053.0	1535.5	1611.6	1307.3	1200.3	1288.3	1352.5	*1352.5*	1369.1
75°	335.1	366.0	430.2	506.3	610.9	715.5	865.2	995.9	1064.9	*1069.6*	1062.5
77.5°	171.1	183.0	230.6	249.6	273.3	318.5	413.6	530.1	591.9	*615.6*	610.9
80°	80.8	85.6	97.5	114.1	140.2	178.3	223.4	266.2	304.2	*309.0*	335.1
82.5°	42.8	47.5	52.3	61.8	76.1	95.1	130.7	156.9	180.6	*185.4*	206.8
85°	16.6	19.0	21.4	23.8	33.3	40.4	54.7	73.7	90.3	*90.3*	107.0
87.5°	0.0	0.0	0.0	0.0	2.4	4.8	9.5	11.9	16.6	*16.6*	28.5
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: P641459
CATALOG NUMBER: GWS-SA5F-830-U-T2-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5176.9	5176.9	5176.9	5176.9	5176.9	5176.9	5176.9	5176.9	5176.9	5176.9	5176.9
2.5°	5229.2	5160.3	5129.4	5079.5	5039.1	4993.9	4958.3	4932.1	4915.5	4906.0	4896.5
5°	5314.8	5210.2	5127.0	5027.2	4958.3	4891.7	4837.0	4799.0	4780.0	4765.7	4756.2
7.5°	5447.9	5307.7	5150.8	4996.3	4875.1	4768.1	4699.2	4658.8	4632.6	4623.1	4616.0
10°	5630.9	5436.0	5176.9	4932.1	4751.5	4635.0	4587.5	4568.4	4570.8	4566.1	4563.7
12.5°	5837.7	5571.5	5169.8	4818.0	4618.4	4549.4	4551.8	4582.7	4618.4	4627.9	4630.2
15°	6061.1	5704.6	5100.9	4670.6	4513.8	4520.9	4582.7	4656.4	4722.9	4749.1	4753.8
17.5°	6303.6	5816.3	4974.9	4509.0	4428.2	4504.3	4618.4	4739.6	4837.0	4879.8	4891.7
20°	6574.6	5911.4	4796.6	4349.8	4347.4	4473.4	4639.7	4799.0	4922.6	4979.6	4989.1
22.5°	6862.2	5970.8	4577.9	4202.4	4264.2	4433.0	4623.1	4789.5	4920.2	4977.3	4989.1
25°	7152.1	5989.8	4337.9	4066.9	4178.6	4368.8	4542.3	4675.4	4799.0	4848.9	4858.4
27.5°	7423.1	5935.2	4109.7	3950.4	4100.2	4273.7	4390.2	4461.5	4547.0	4585.1	4592.2
30°	7698.8	5825.8	3917.2	3857.7	4012.2	4143.0	4195.3	4200.0	4233.3	4233.3	4238.0
32.5°	7976.9	5664.2	3748.4	3767.4	3902.9	3988.5	3995.6	3940.9	3900.5	3834.0	3831.6
35°	8297.8	5500.2	3610.5	3665.2	3774.5	3826.8	3805.4	3700.9	3603.4	3494.1	3489.3
37.5°	8594.9	5331.4	3494.1	3560.6	3629.6	3667.6	3617.7	3491.7	3410.9	3299.2	3282.5
40°	8839.8	5179.3	3382.4	3451.3	3484.6	3517.8	3437.0	3334.8	3346.7	3284.9	3282.5
42.5°	8982.4	5031.9	3277.8	3330.1	3351.5	3375.2	3303.9	3227.9	3292.0	3244.5	3246.9
45°	9087.0	4903.6	3182.7	3201.7	3254.0	3289.7	3223.1	3137.5	3151.8	2968.8	2926.0
47.5°	9205.8	4832.3	3092.4	3073.4	3166.1	3227.9	3125.6	3002.0	2916.5	2735.8	2719.2
50°	9331.8	4806.1	2997.3	2945.0	3056.7	3116.1	2997.3	2842.8	2731.1	2633.6	2624.1
52.5°	9374.6	4803.8	2878.4	2790.5	2902.2	2985.4	2885.6	2728.7	2595.6	2500.5	2495.8
55°	9543.3	4872.7	2726.3	2579.0	2683.5	2854.7	2781.0	2555.2	2448.2	2405.4	2400.7
57.5°	*9740.6*	*4884.6*	*2486.3*	*2348.4*	*2493.4*	*2695.4*	*2602.7*	*2407.8*	*2291.3*	*2239.1*	*2234.3*
60°	9659.8	4592.2	2229.5	2172.5	2331.8	2545.7	2460.1	2291.3	2155.9	2105.9	2101.2
62.5°	7361.3	3242.1	2041.8	2020.4	2158.2	2329.4	2312.7	2136.8	2008.5	1972.8	1968.1
65°	4428.2	2277.1	1861.1	1858.7	1956.2	2120.2	2141.6	1999.0	1863.5	1813.6	1813.6
67.5°	2189.1	1742.3	1656.7	1644.8	1706.6	1823.1	1913.4	1796.9	1682.9	1635.3	1628.2
70°	1547.4	1535.5	1507.0	1473.7	1485.6	1533.1	1571.1	1473.7	1352.5	1304.9	1295.4
72.5°	1338.2	1340.6	1321.6	1295.4	1285.9	1252.6	1219.4	1148.1	1074.4	1024.5	1029.2
75°	1038.7	1043.5	1055.4	1045.8	1019.7	984.0	948.4	858.1	798.6	751.1	741.6
77.5°	606.1	629.9	667.9	658.4	663.2	613.2	599.0	511.0	456.4	423.1	416.0
80°	342.3	356.5	373.2	385.1	370.8	349.4	318.5	271.0	254.3	230.6	225.8
82.5°	206.8	221.1	228.2	237.7	232.9	204.4	180.6	149.7	135.5	123.6	121.2
85°	104.6	114.1	121.2	126.0	111.7	92.7	83.2	66.6	57.0	49.9	49.9
87.5°	26.1	28.5	33.3	28.5	26.1	11.9	9.5	2.4	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

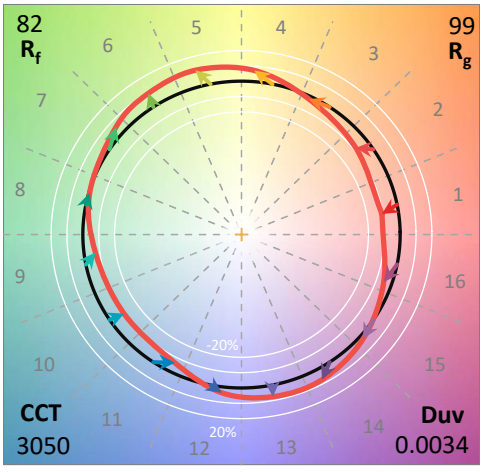
Test Information

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

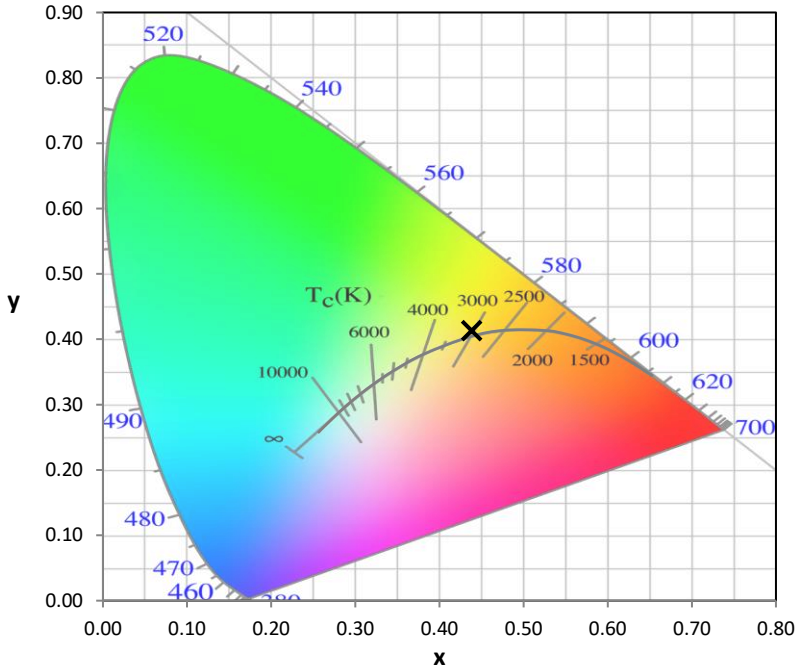
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

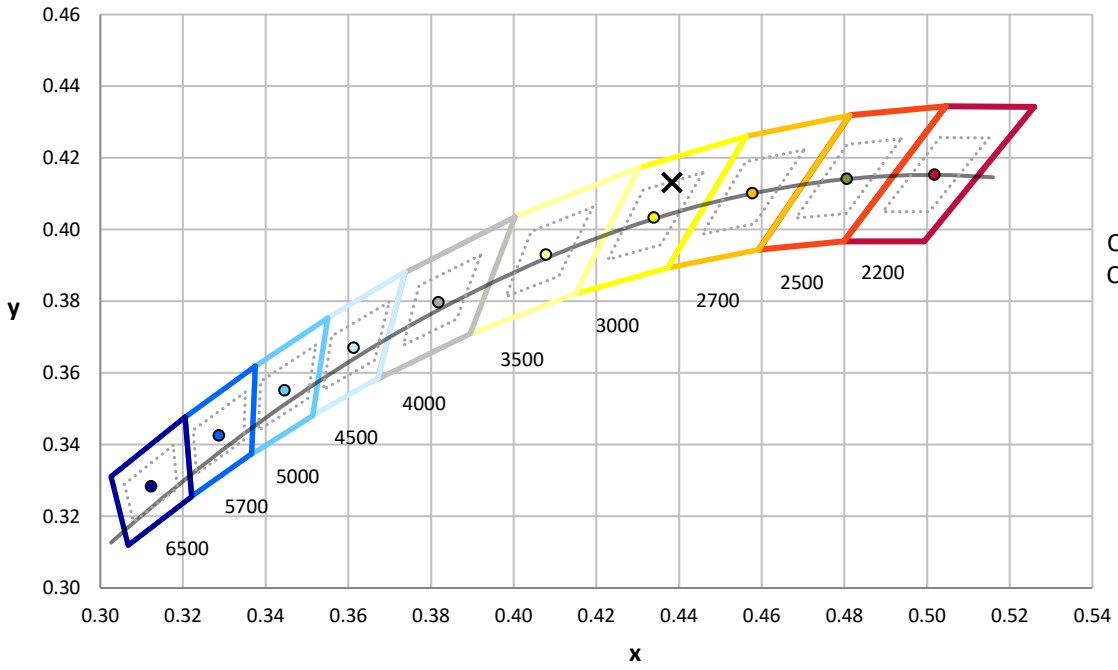
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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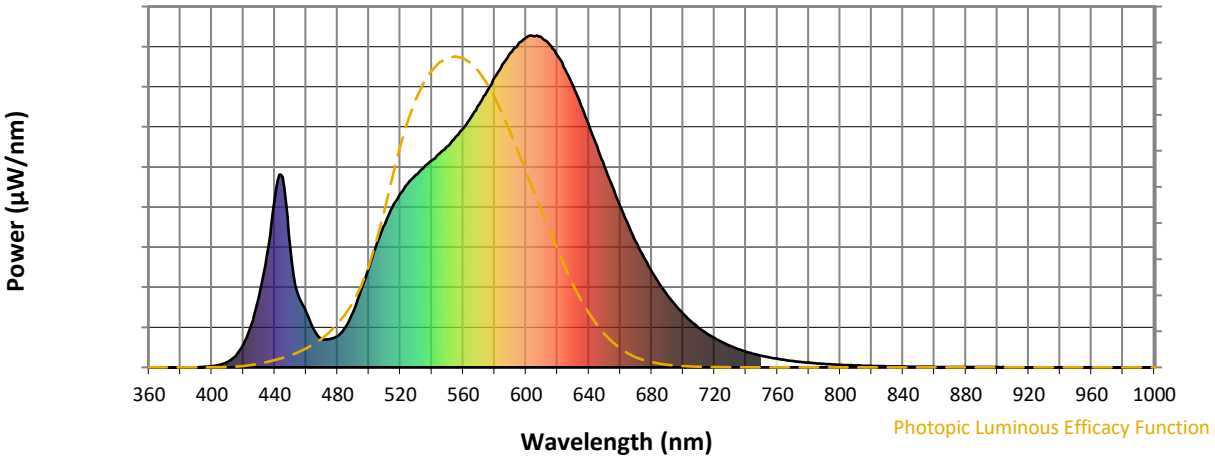
Photopic Flux vs. Wavelength



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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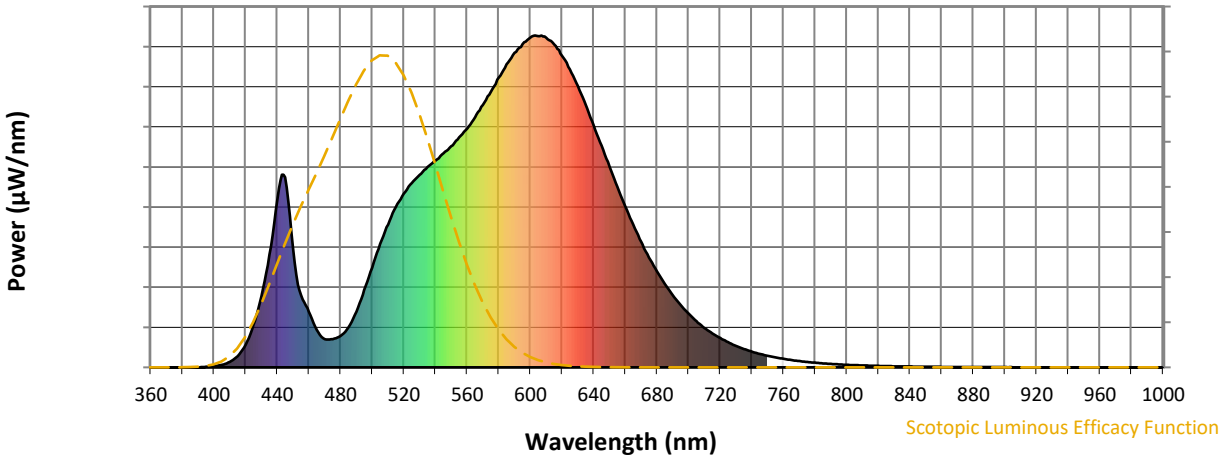
Scotopic Flux vs. Wavelength



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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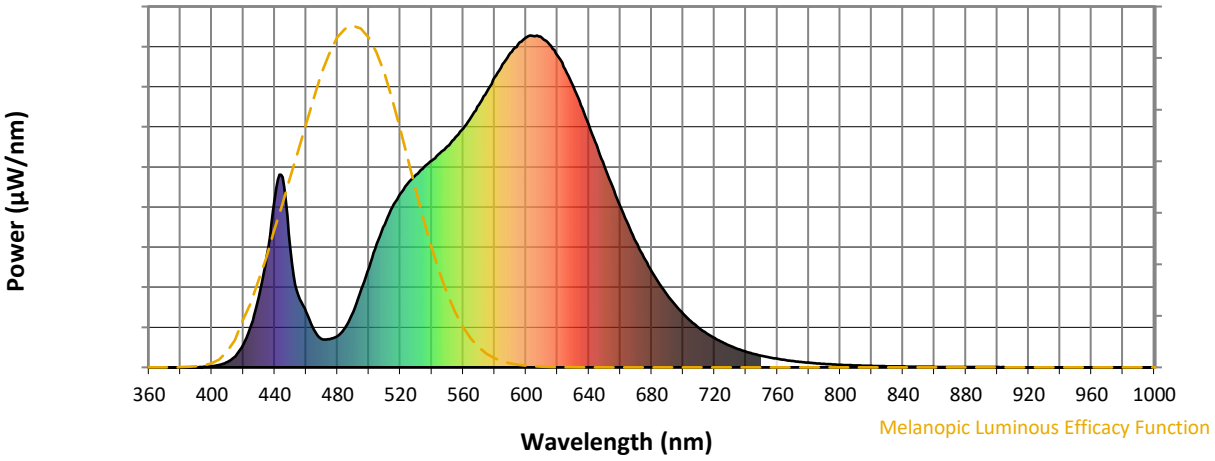
Melanopic Flux vs. Wavelength



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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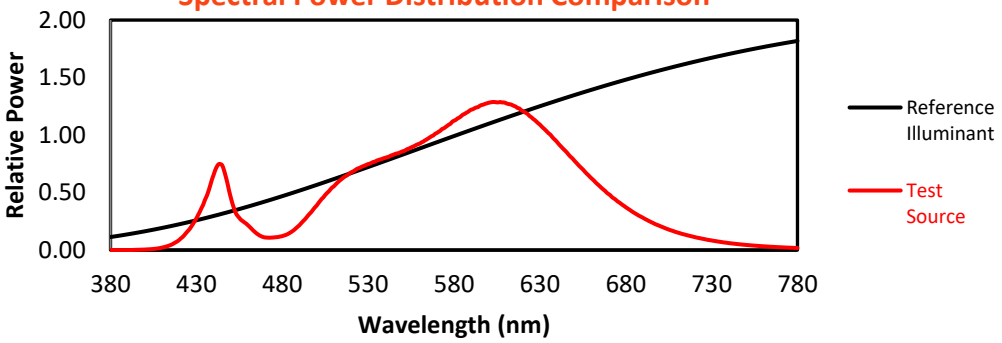
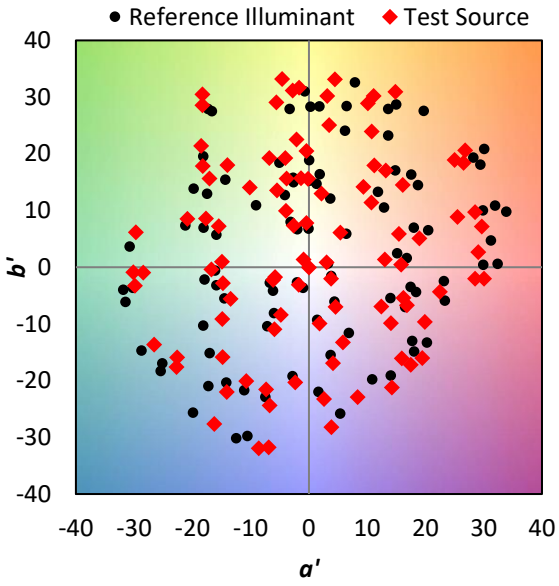
Summary

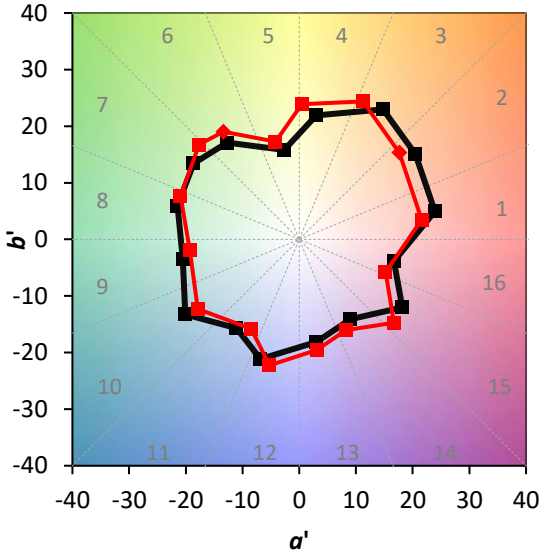
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

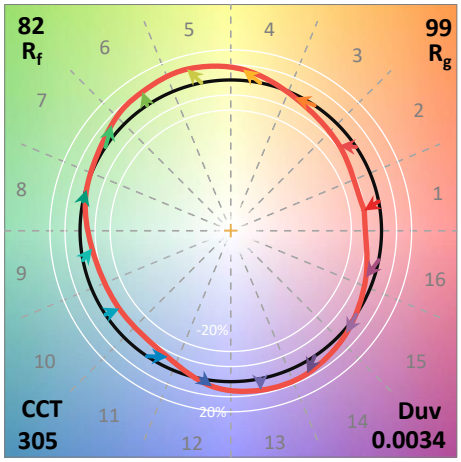
Spectral Power Distribution Comparison

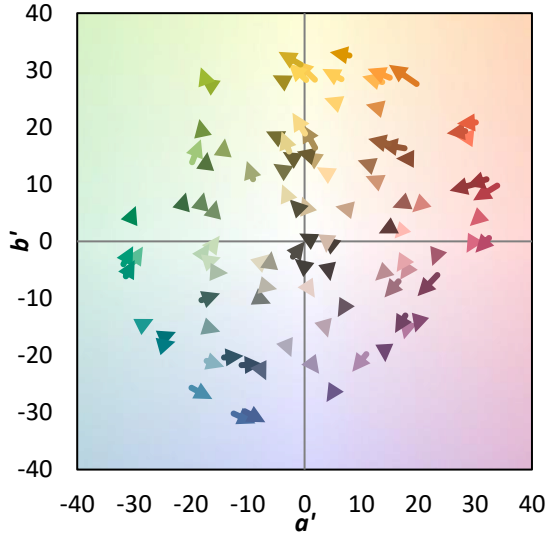


Color Vector Graphics









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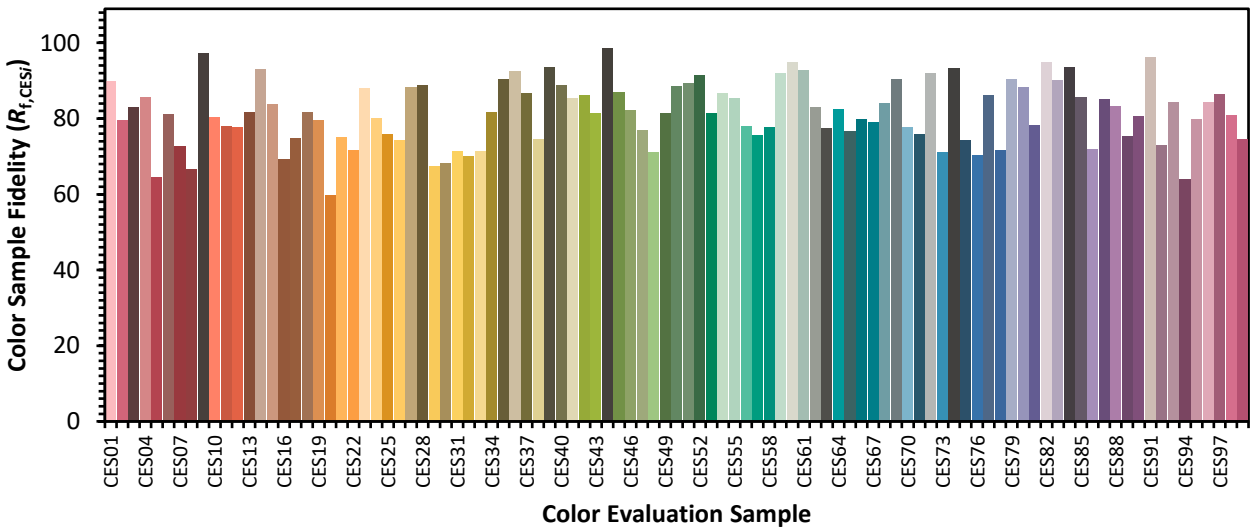
Individual Sample Fidelity Index ($R_{f,i}$)

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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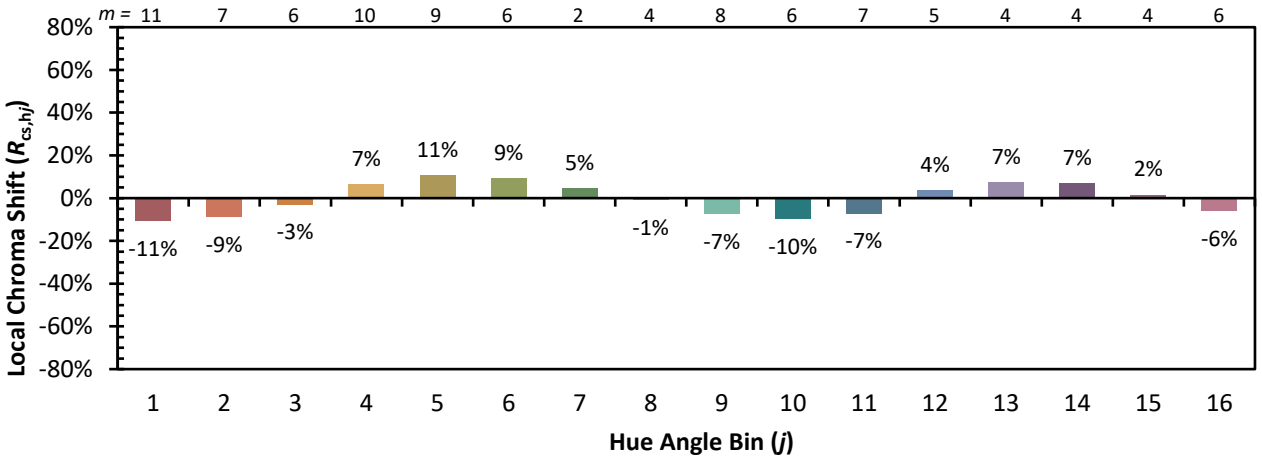
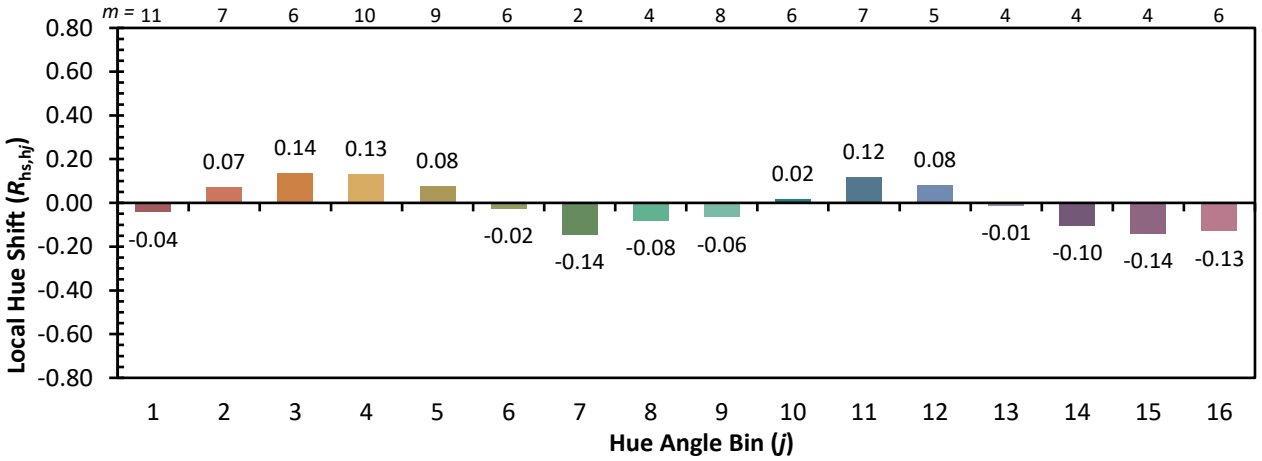
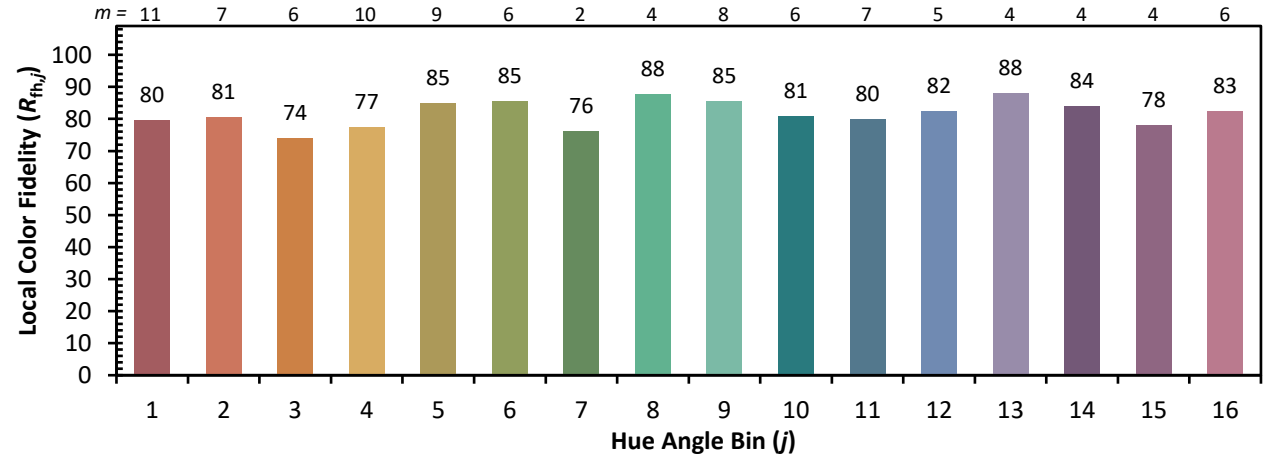
Color Rendition by Hue-Angle Bin







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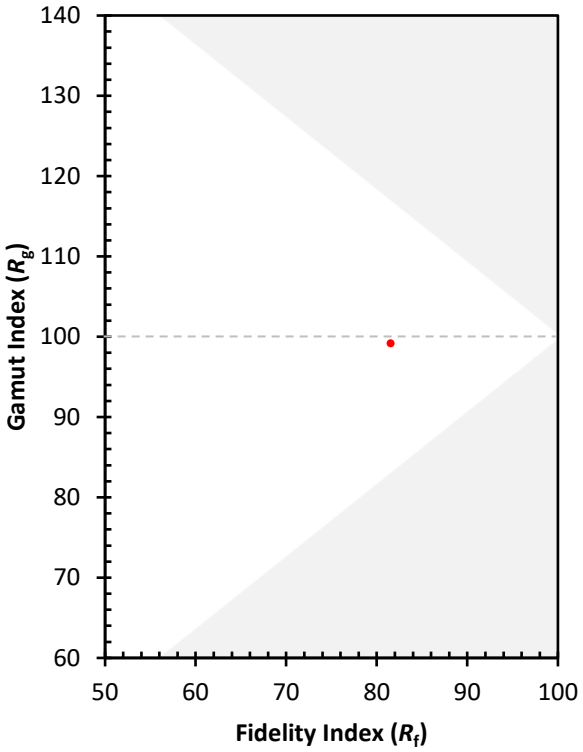
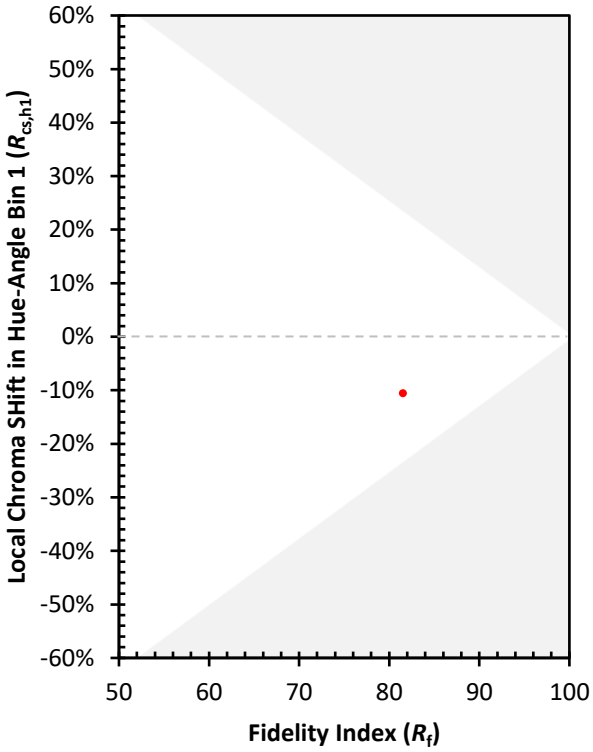
Measure Comparisons





(END OF REPORT)