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: P638489

Luminaire Tested: GWS-SA4E-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:	P638489
	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-SA4E-830-U-T2-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSLLED GLARE SHIELD, WH
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	20268.1 lumens
Efficiency:	N/A
Efficacy:	100.0 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

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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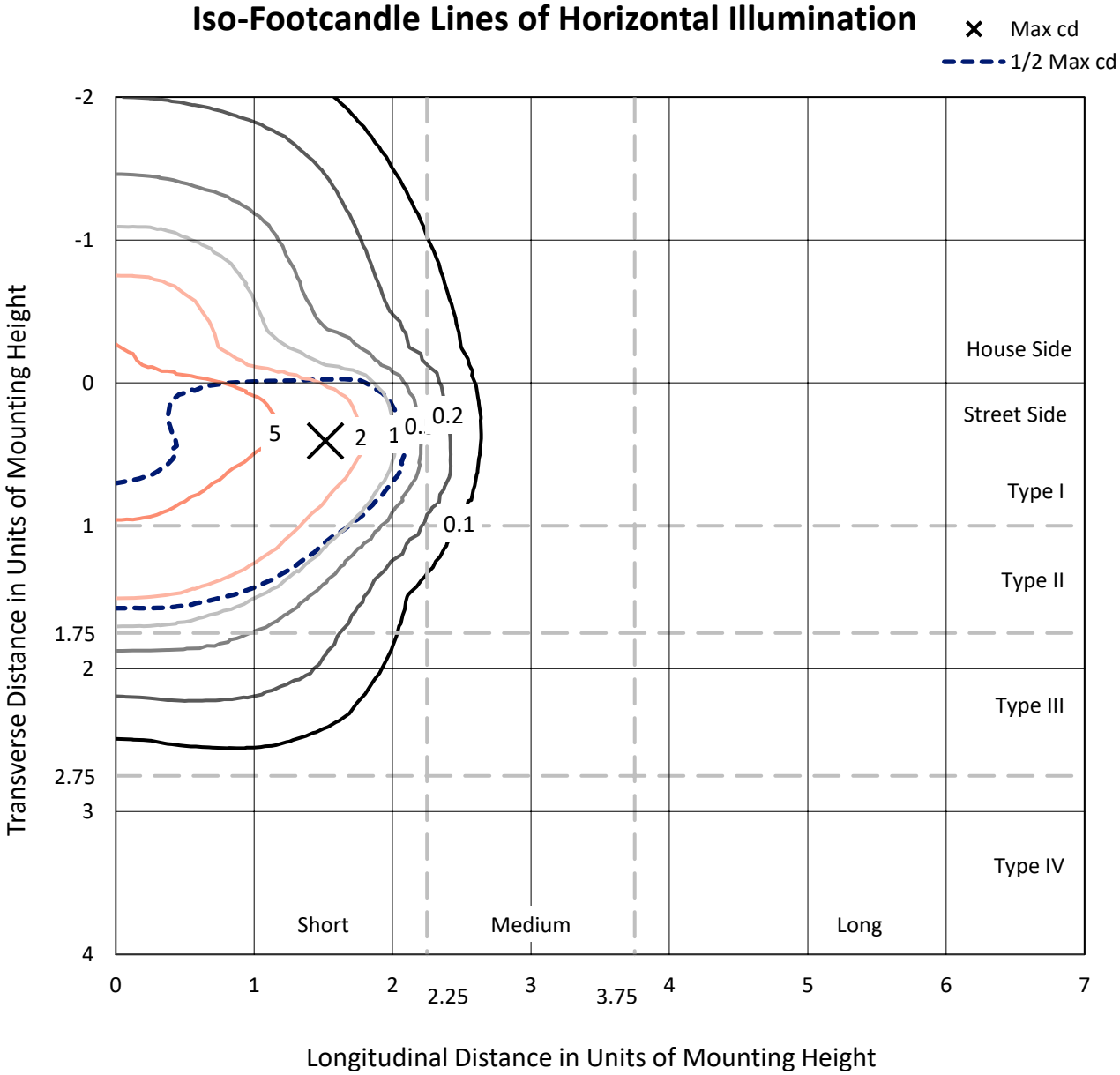
Scaled Data Report

REPORT NUMBER: P638489
CATALOG NUMBER: GWS-SA4E-830-U-T2-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
Type II - Short - N/A

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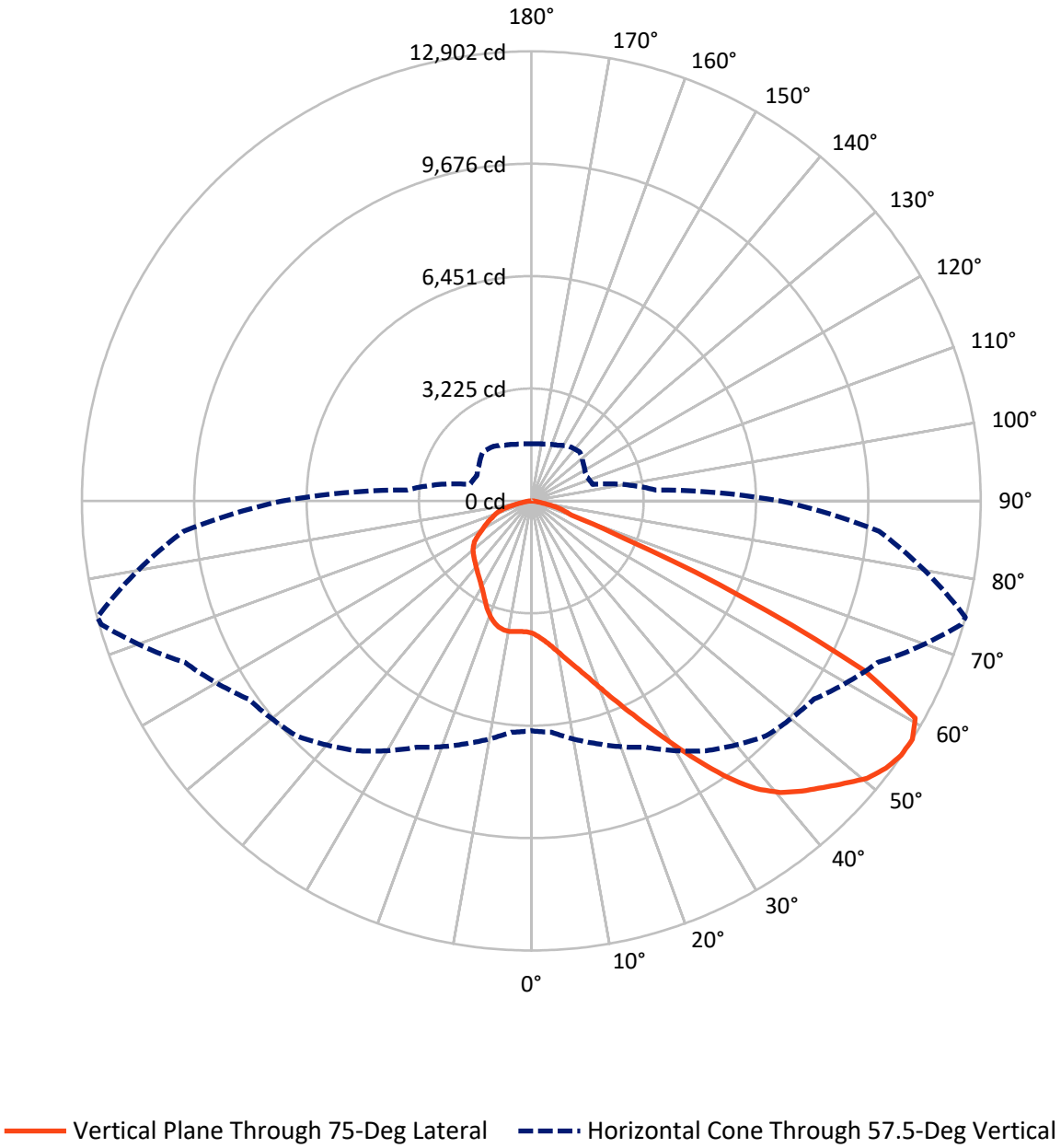
Luminous Intensity Polar Plot



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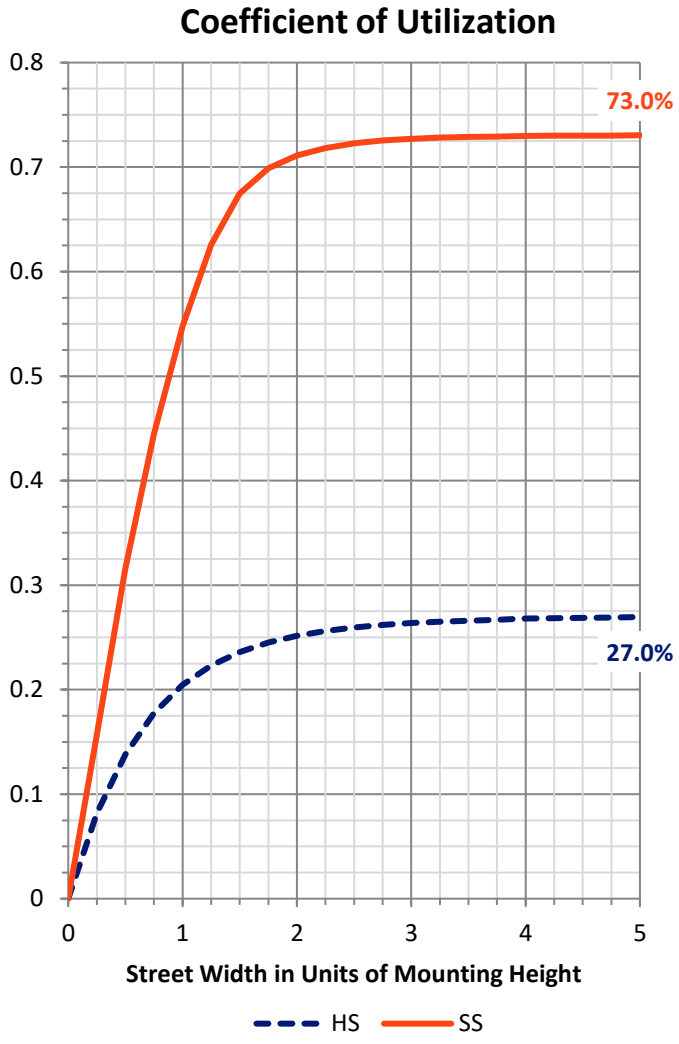
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5482.9	0.0	5482.9
	% Fixture	27.1	0.0	27.1
Street Side	Lumens	14785.2	0.0	14785.2
	% Fixture	72.9	0.0	72.9
Total	Lumens	20268.1	0.0	20268.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.8	1.9
10°-20°	1209.3	6.0
20°-30°	2144.7	10.6
30°-40°	3283.2	16.2
40°-50°	4571.5	22.6
50°-60°	5238.1	25.8
60°-70°	2691.4	13.3
70°-80°	677.6	3.3
80°-90°	72.4	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°	20268.1	100.0
0°-180°	20268.1	100.0



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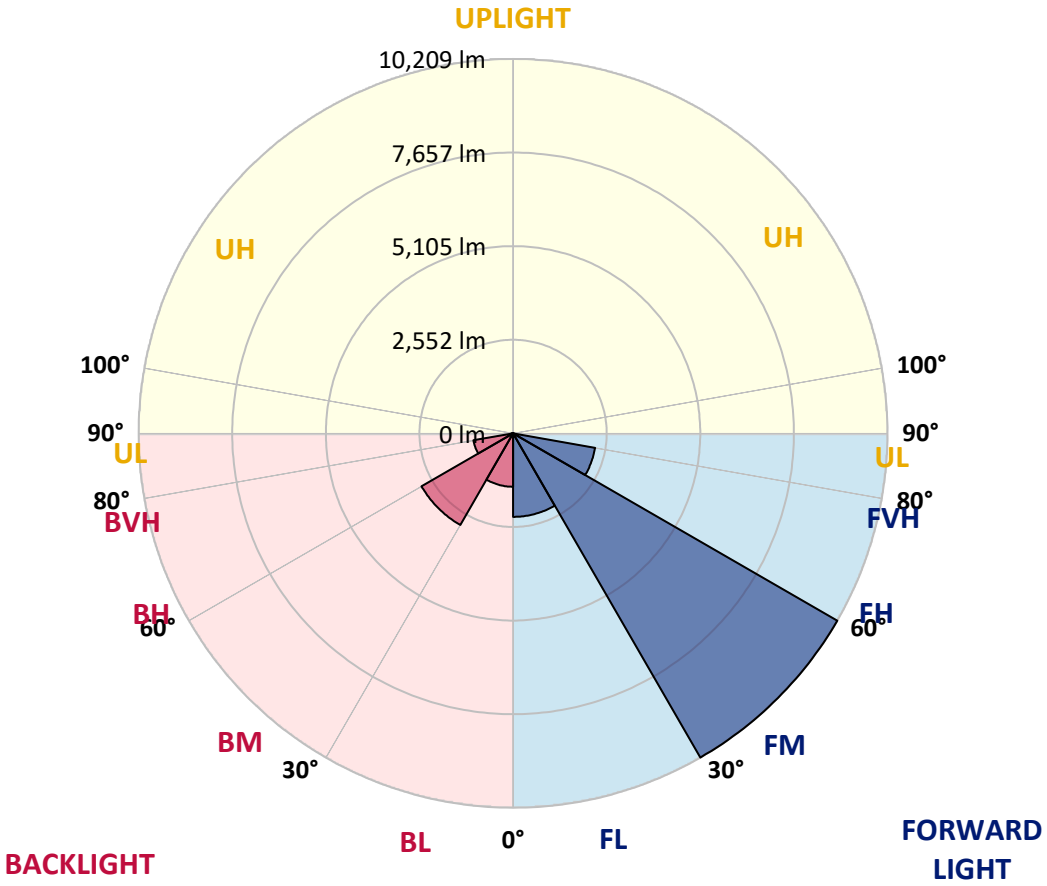
REPORT NUMBER: P638489
CATALOG NUMBER: GWS-SA4E-830-U-T2-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2277.2	11.2			
FM	(30°-60°)	10209.3	50.4			
FH	(60°-80°)	2271.8	11.2			G2/5000
FVH	(80°-90°)	26.8	0.1			G1/100
BL	(0°-30°)	1456.6	7.2	B3/2500		
BM	(30°-60°)	2883.5	14.2	B3/5000		
BH	(60°-80°)	1097.2	5.4	B3/2500		G3/2500
BVH	(80°-90°)	45.6	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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REPORT NUMBER: P638489
CATALOG NUMBER: GWS-SA4E-830-U-T2-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	3795.7	3795.7	3795.7	3795.7	3795.7	3795.7	3795.7	3795.7	3795.7	*3795.7*	3795.7
2.5°	4078.1	4088.5	4078.1	4095.5	4060.6	4044.9	4006.6	3949.1	3903.8	*3896.8*	3846.3
5°	4395.2	4417.9	4404.0	4397.0	4349.9	4315.1	4257.6	4142.5	4048.4	*4034.5*	3935.1
7.5°	4599.1	4614.8	4614.8	4620.1	4602.6	4562.5	4501.5	4365.6	4233.2	*4212.2*	4062.4
10°	4667.1	4679.3	4702.0	4745.5	4780.4	4792.6	4752.5	4621.8	4459.7	*4438.8*	4229.7
12.5°	4682.8	4696.7	4731.6	4811.8	4907.6	4994.7	5001.7	4905.9	4724.6	*4702.0*	4423.1
15°	4712.4	4726.4	4773.4	4872.8	5013.9	5181.2	5284.0	5217.8	5017.4	*4993.0*	4642.7
17.5°	4708.9	4724.6	4794.3	4926.8	5116.7	5359.0	5557.7	5585.5	5378.2	*5336.3*	4891.9
20°	4700.2	4714.2	4789.1	4951.2	5186.5	5519.3	5878.3	6023.0	5799.9	*5761.6*	5183.0
22.5°	4769.9	4785.6	4843.1	4977.3	5223.0	5643.1	6174.6	6523.1	6300.1	*6246.0*	5517.6
25°	4926.8	4949.4	4984.3	5076.7	5289.3	5752.8	6477.8	7089.5	6861.2	*6796.8*	5881.8
27.5°	5169.0	5196.9	5245.7	5289.3	5437.4	5892.3	6779.3	7723.9	7495.6	*7427.6*	6267.0
30°	5465.3	5501.9	5564.6	5594.3	5695.3	6097.9	7107.0	8377.4	8245.0	*8150.9*	6700.9
32.5°	5874.8	5925.4	5984.6	5993.3	6054.3	6409.9	7431.1	9025.7	9024.0	*8957.8*	7194.1
35°	6408.1	6462.1	6474.3	6486.5	6516.2	6838.6	7823.2	9616.5	9844.8	*9768.2*	7730.9
37.5°	6990.2	7068.6	7087.8	7033.8	7075.6	7354.4	8264.2	10090.6	10559.4	*10477.5*	8250.2
40°	7612.4	7643.7	7696.0	7610.6	7662.9	7945.2	8696.4	10393.8	11092.7	*11005.5*	8659.8
42.5°	8058.5	8116.0	8194.5	8163.1	8192.7	8450.6	8999.6	10540.2	11472.6	*11385.4*	8954.3
45°	8543.0	8560.4	8611.0	8604.0	8621.4	8861.9	9217.5	10604.7	11812.4	*11734.0*	9205.3
47.5°	8964.8	8990.9	9024.0	8985.7	8947.3	9104.2	9395.2	10660.5	12204.5	*12110.4*	9468.4
50°	9370.8	9393.5	9433.6	9322.0	9179.1	9219.2	9482.4	10737.1	12572.3	*12506.0*	9675.8
52.5°	9445.8	9470.2	9658.4	9681.0	9498.0	9356.9	9635.7	10906.2	12788.4	*12746.5*	9750.7
55°	8502.9	8546.5	8921.2	9351.6	9803.0	9757.7	9881.4	10995.1	12873.8	*12884.2*	9884.9
57.5°	*6599.8*	*6662.6*	*7209.8*	*7800.6*	*8750.4*	*9536.4*	*9912.8*	*10972.4*	*12844.1*	*12901.6*	*10022.6*
60°	4329.0	4365.6	5013.9	5676.2	6660.8	7748.3	8872.4	10564.6	12581.0	*12662.9*	9987.8
62.5°	2614.1	2656.0	3177.0	3679.0	4259.3	4986.0	6017.7	8490.7	10545.4	*10728.4*	7999.3
65°	1824.7	1880.4	2337.0	2750.1	2950.5	2800.6	3048.1	4742.0	6570.2	*6646.9*	4888.4
67.5°	1322.8	1361.1	1735.8	2227.2	2448.6	1978.0	1507.5	2100.0	2861.6	*2889.5*	2016.4
70°	866.2	909.7	1249.6	1695.7	1998.9	1603.3	1127.6	1136.3	1204.2	*1218.2*	1171.1
72.5°	475.8	501.9	772.0	1125.8	1181.6	958.5	880.1	944.6	991.6	*991.6*	1003.8
75°	245.7	268.4	315.4	371.2	447.9	524.6	634.4	730.2	780.8	*784.2*	779.0
77.5°	125.5	134.2	169.0	183.0	200.4	233.5	303.2	388.6	433.9	*451.4*	447.9
80°	59.3	62.7	71.5	83.7	102.8	130.7	163.8	195.2	223.1	*226.6*	245.7
82.5°	31.4	34.9	38.3	45.3	55.8	69.7	95.9	115.0	132.4	*135.9*	151.6
85°	12.2	13.9	15.7	17.4	24.4	29.6	40.1	54.0	66.2	*66.2*	78.4
87.5°	0.0	0.0	0.0	0.0	1.7	3.5	7.0	8.7	12.2	*12.2*	20.9
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: P638489
CATALOG NUMBER: GWS-SA4E-830-U-T2-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3795.7	3795.7	3795.7	3795.7	3795.7	3795.7	3795.7	3795.7	3795.7	3795.7	3795.7
2.5°	3834.1	3783.5	3760.9	3724.3	3694.6	3661.5	3635.4	3616.2	3604.0	3597.1	3590.1
5°	3896.8	3820.1	3759.1	3685.9	3635.4	3586.6	3546.5	3518.6	3504.7	3494.2	3487.3
7.5°	3994.4	3891.6	3776.6	3663.3	3574.4	3496.0	3445.4	3415.8	3396.6	3389.7	3384.4
10°	4128.6	3985.7	3795.7	3616.2	3483.8	3398.4	3363.5	3349.6	3351.3	3347.8	3346.1
12.5°	4280.2	4085.0	3790.5	3532.6	3386.2	3335.6	3337.4	3360.0	3386.2	3393.2	3394.9
15°	4444.0	4182.6	3740.0	3424.5	3309.5	3314.7	3360.0	3414.1	3462.9	3482.0	3485.5
17.5°	4621.8	4264.5	3647.6	3306.0	3246.8	3302.5	3386.2	3475.1	3546.5	3577.9	3586.6
20°	4820.5	4334.2	3516.9	3189.2	3187.5	3279.9	3401.9	3518.6	3609.3	3651.1	3658.1
22.5°	5031.3	4377.8	3356.6	3081.2	3126.5	3250.2	3389.7	3511.7	3607.5	3649.3	3658.1
25°	5244.0	4391.8	3180.5	2981.9	3063.8	3203.2	3330.4	3428.0	3518.6	3555.2	3562.2
27.5°	5442.6	4351.7	3013.2	2896.5	3006.3	3133.5	3218.9	3271.2	3333.9	3361.8	3367.0
30°	5644.8	4271.5	2872.1	2828.5	2941.8	3037.6	3076.0	3079.5	3103.9	3103.9	3107.3
32.5°	5848.7	4153.0	2748.3	2762.3	2861.6	2924.3	2929.6	2889.5	2859.9	2811.1	2809.3
35°	6084.0	4032.7	2647.3	2687.3	2767.5	2805.8	2790.2	2713.5	2642.0	2561.9	2558.4
37.5°	6301.8	3909.0	2561.9	2610.7	2661.2	2689.1	2652.5	2560.1	2500.9	2418.9	2406.7
40°	6481.3	3797.5	2479.9	2530.5	2554.9	2579.3	2520.0	2445.1	2453.8	2408.5	2406.7
42.5°	6585.9	3689.4	2403.3	2441.6	2457.3	2474.7	2422.4	2366.7	2413.7	2378.9	2380.6
45°	6662.6	3595.3	2333.6	2347.5	2385.8	2412.0	2363.2	2300.4	2310.9	2176.7	2145.3
47.5°	6749.7	3543.0	2267.3	2253.4	2321.4	2366.7	2291.7	2201.1	2138.4	2005.9	1993.7
50°	6842.1	3523.9	2197.6	2159.3	2241.2	2284.8	2197.6	2084.3	2002.4	1931.0	1924.0
52.5°	6873.4	3522.1	2110.5	2046.0	2127.9	2188.9	2115.7	2000.7	1903.1	1833.4	1829.9
55°	6997.2	3572.7	1998.9	1890.9	1967.6	2093.1	2039.0	1873.5	1795.0	1763.7	1760.2
57.5°	*7141.8*	*3581.4*	*1822.9*	*1721.8*	*1828.2*	*1976.3*	*1908.3*	*1765.4*	*1680.0*	*1641.7*	*1638.2*
60°	7082.6	3367.0	1634.7	1592.9	1709.6	1866.5	1803.8	1680.0	1580.7	1544.1	1540.6
62.5°	5397.3	2377.1	1497.0	1481.3	1582.4	1707.9	1695.7	1566.7	1472.6	1446.5	1443.0
65°	3246.8	1669.6	1364.6	1362.8	1434.3	1554.5	1570.2	1465.7	1366.3	1329.7	1329.7
67.5°	1605.1	1277.4	1214.7	1206.0	1251.3	1336.7	1402.9	1317.5	1233.9	1199.0	1193.8
70°	1134.5	1125.8	1104.9	1080.5	1089.2	1124.1	1152.0	1080.5	991.6	956.8	949.8
72.5°	981.2	982.9	969.0	949.8	942.8	918.4	894.0	841.8	787.7	751.1	754.6
75°	761.6	765.1	773.8	766.8	747.6	721.5	695.4	629.1	585.6	550.7	543.7
77.5°	444.4	461.8	489.7	482.7	486.2	449.6	439.2	374.7	334.6	310.2	305.0
80°	251.0	261.4	273.6	282.3	271.9	256.2	233.5	198.7	186.5	169.0	165.6
82.5°	151.6	162.1	167.3	174.3	170.8	149.9	132.4	109.8	99.3	90.6	88.9
85°	76.7	83.7	88.9	92.4	81.9	68.0	61.0	48.8	41.8	36.6	36.6
87.5°	19.2	20.9	24.4	20.9	19.2	8.7	7.0	1.7	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

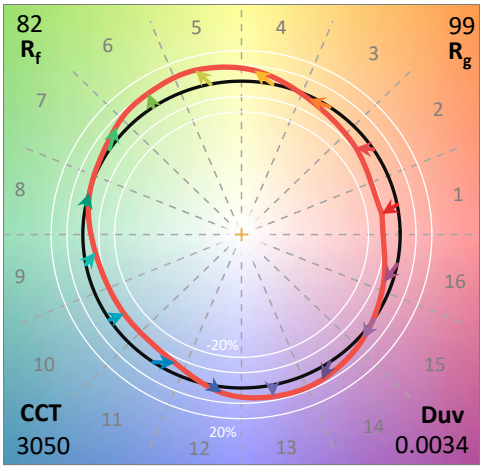
Test Information

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

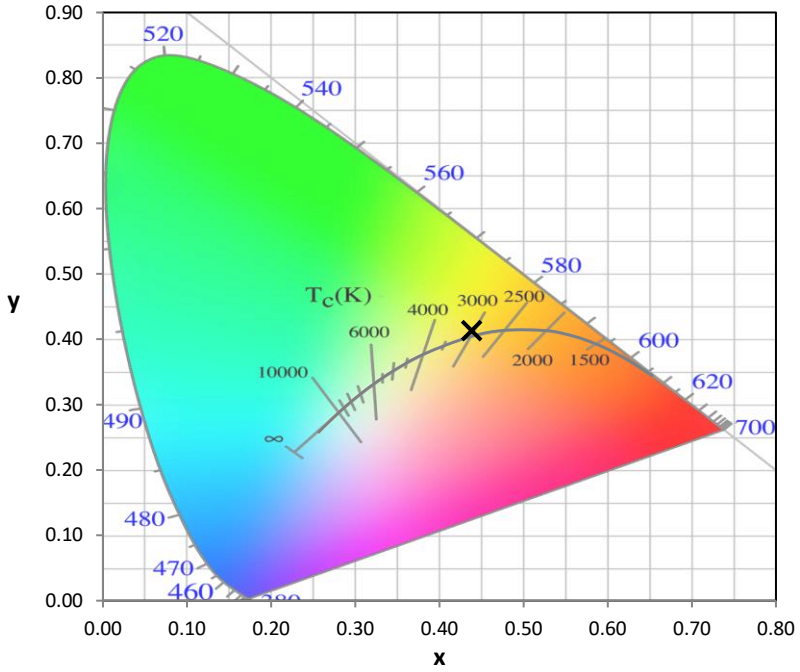
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

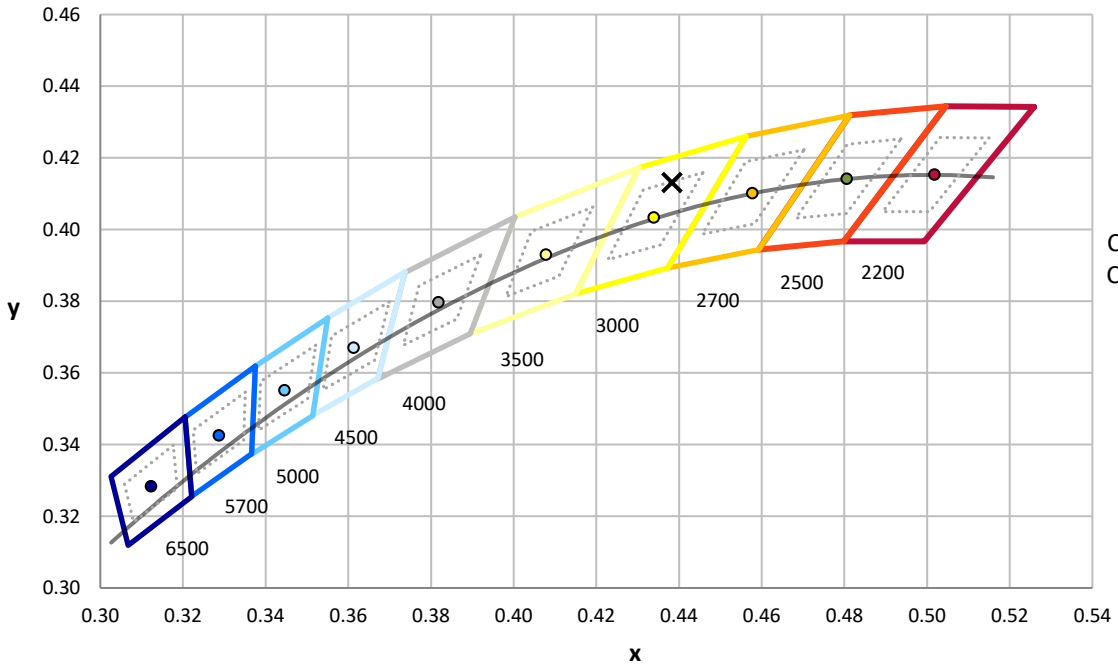
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

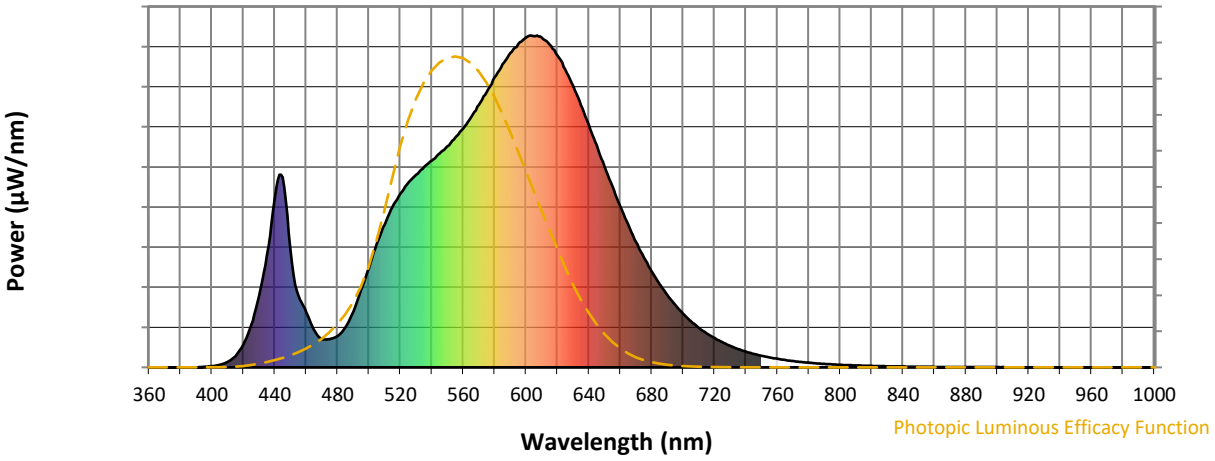


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

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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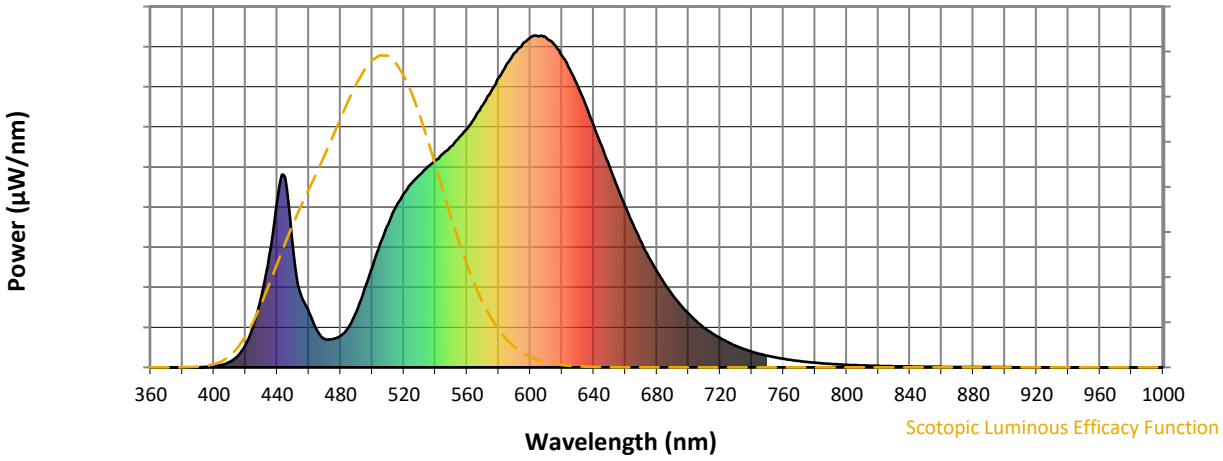
Scotopic Flux vs. Wavelength



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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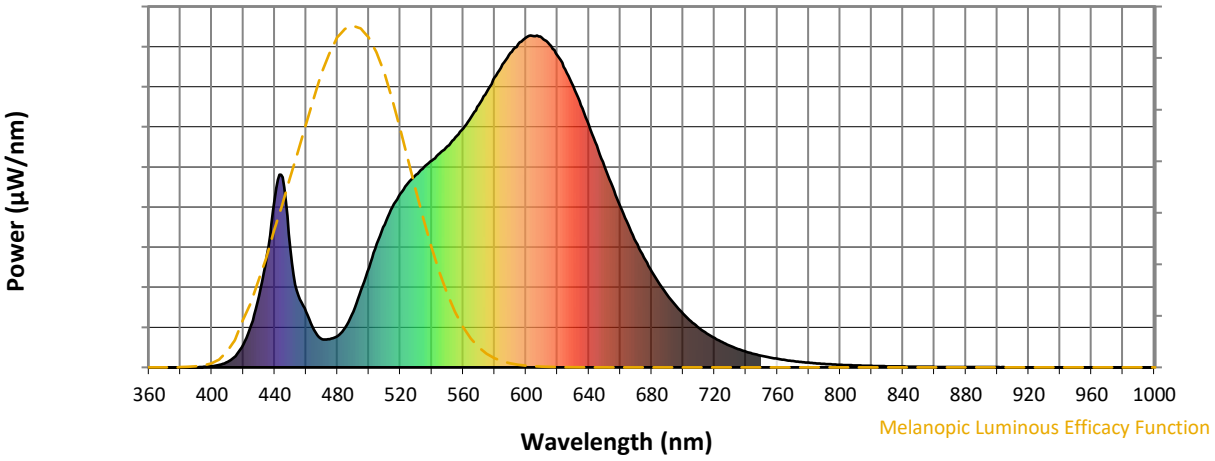
Melanopic Flux vs. Wavelength



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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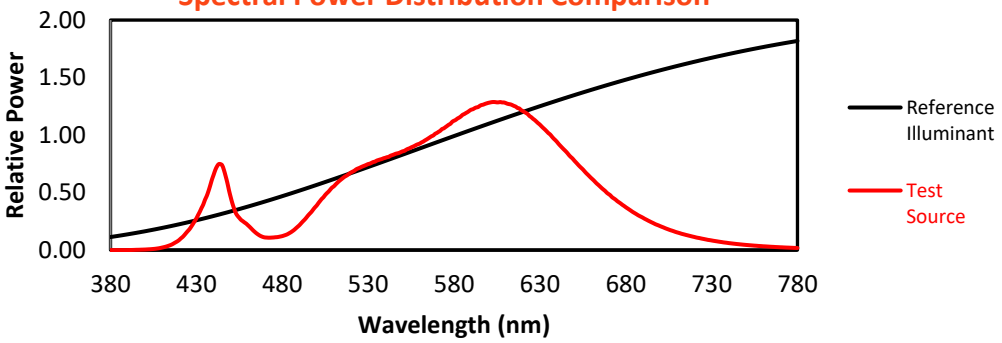
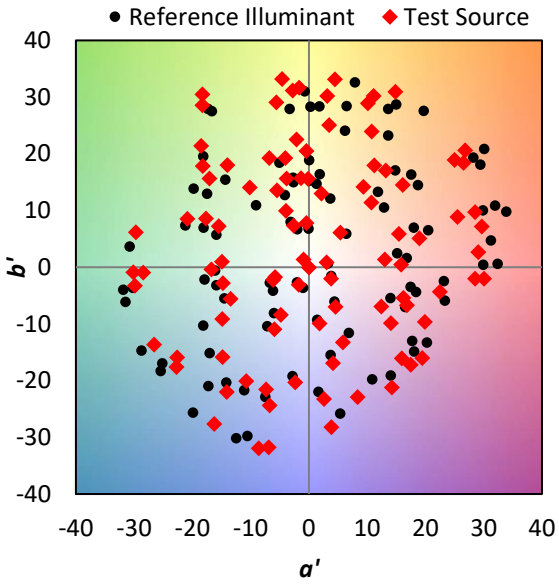
Summary

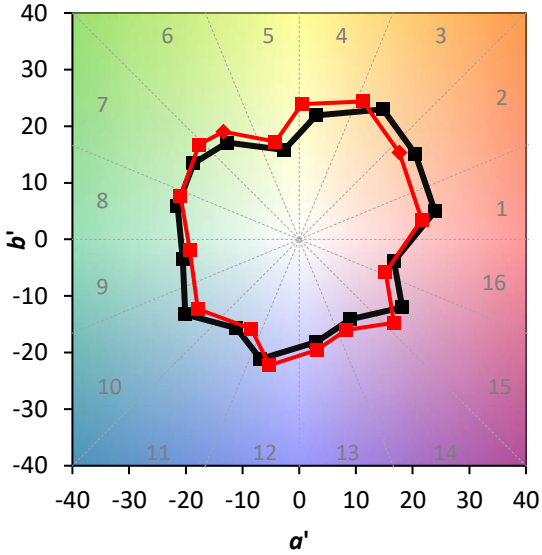
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

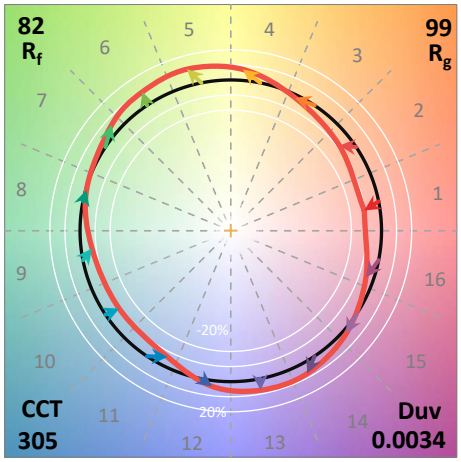
Spectral Power Distribution Comparison

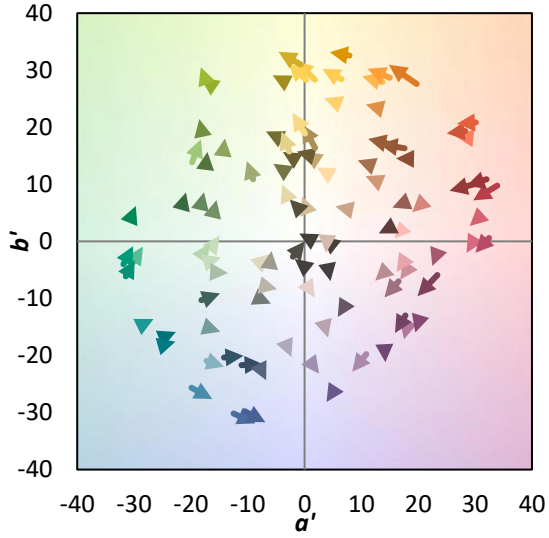


Color Vector Graphics









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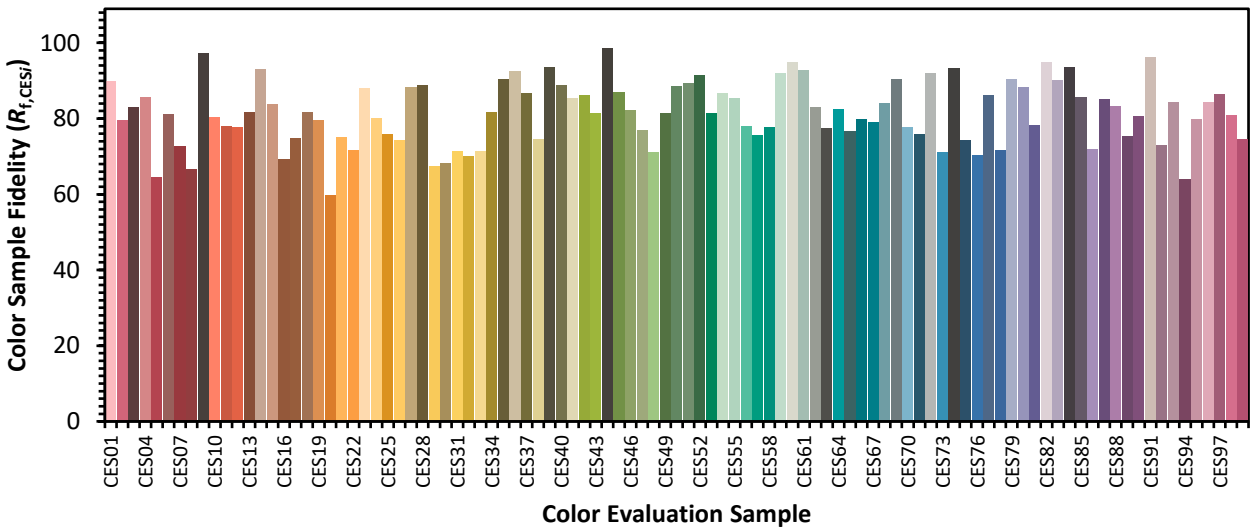
Individual Sample Fidelity Index ($R_{f,i}$)

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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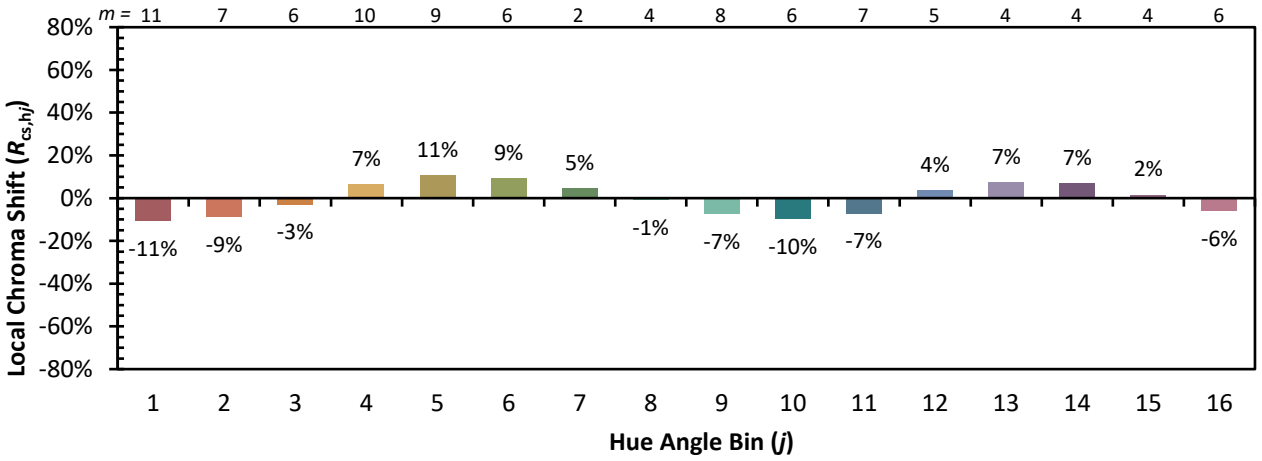
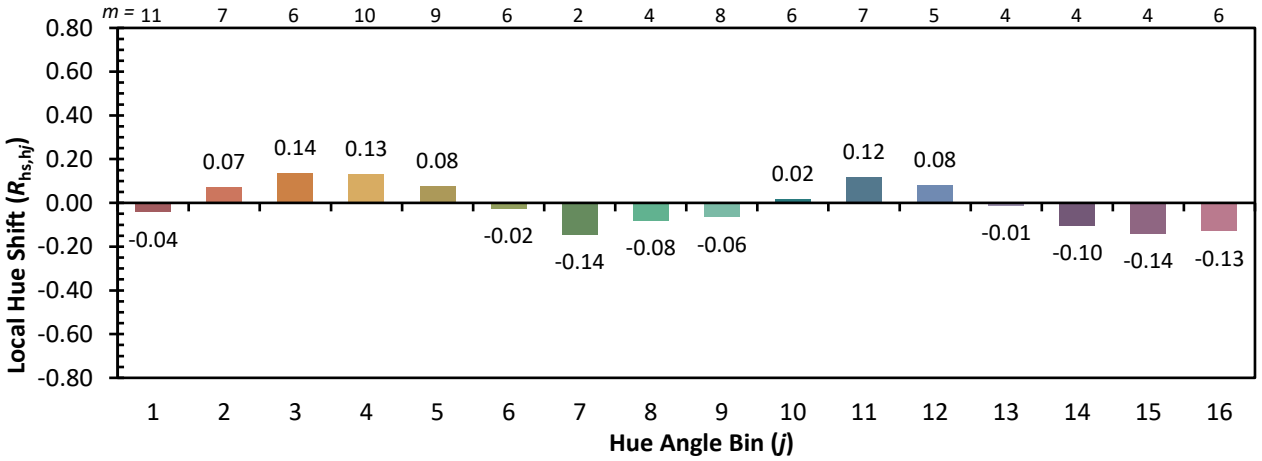
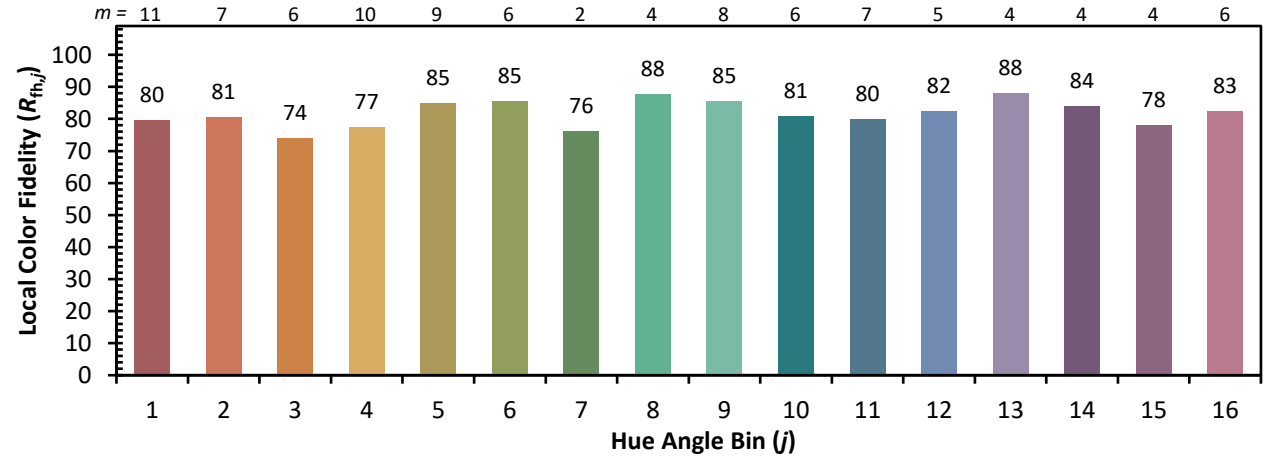
Color Rendition by Hue-Angle Bin







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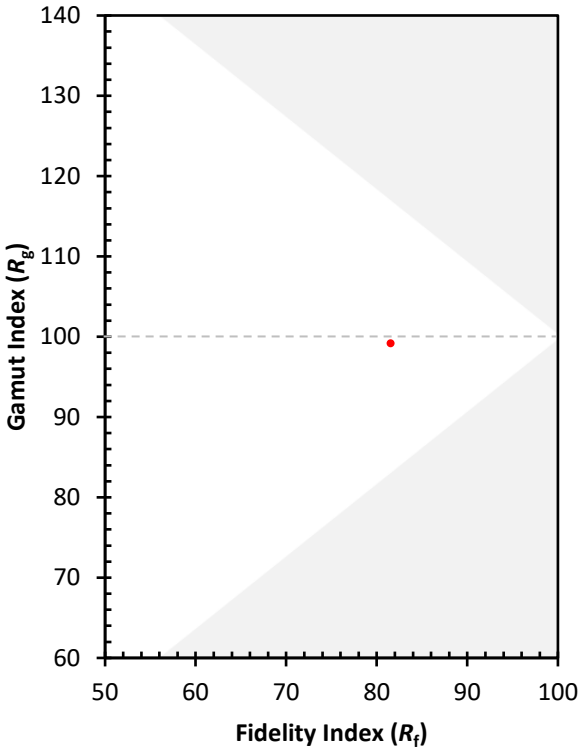
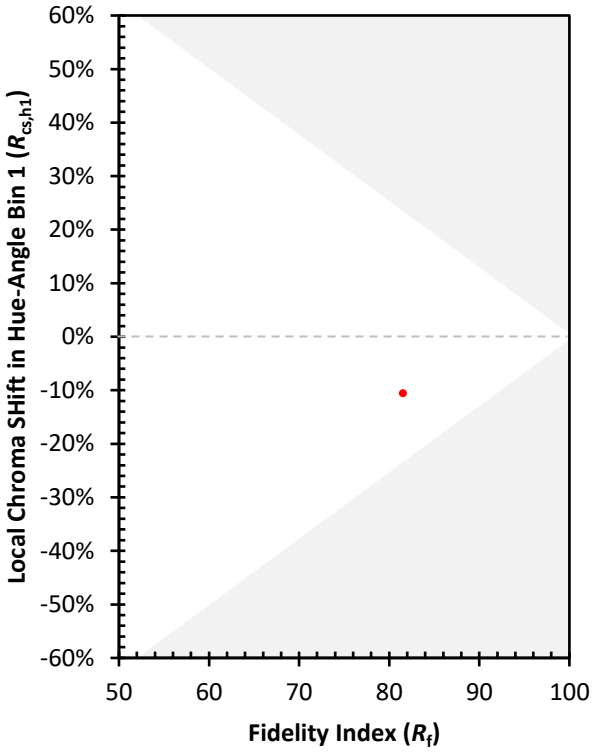
Measure Comparisons





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