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: P638965

Luminaire Tested: GWS-SA4F-830-U-SL2-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:	P638965
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-29)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-SL2-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR 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:	23020.8 lumens
Efficiency:	N/A
Efficacy:	102.2 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):	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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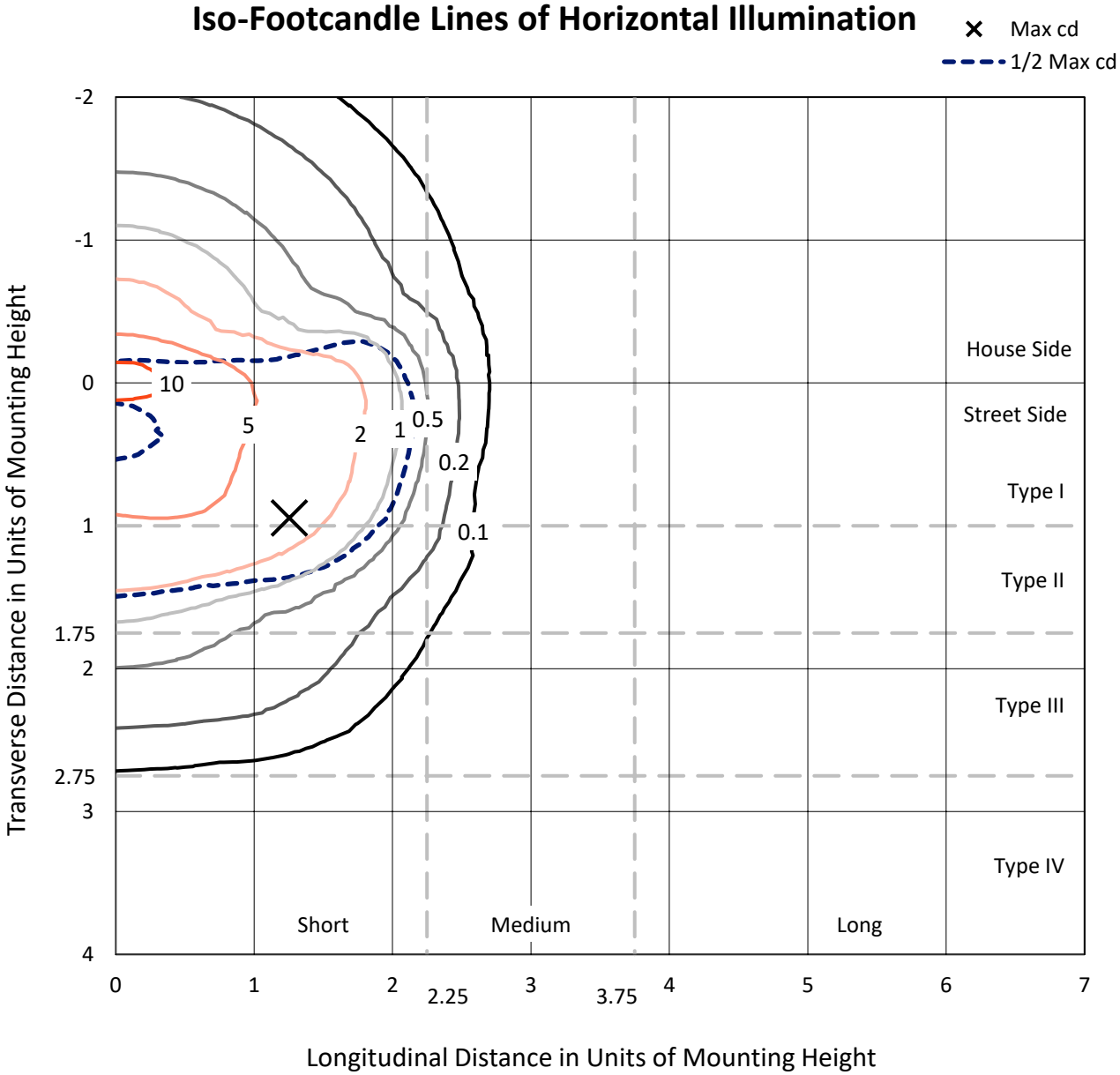
REPORT NUMBER: P638965
CATALOG NUMBER: GWS-SA4F-830-U-SL2-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 11.8 fc
Type II - Short - N/A

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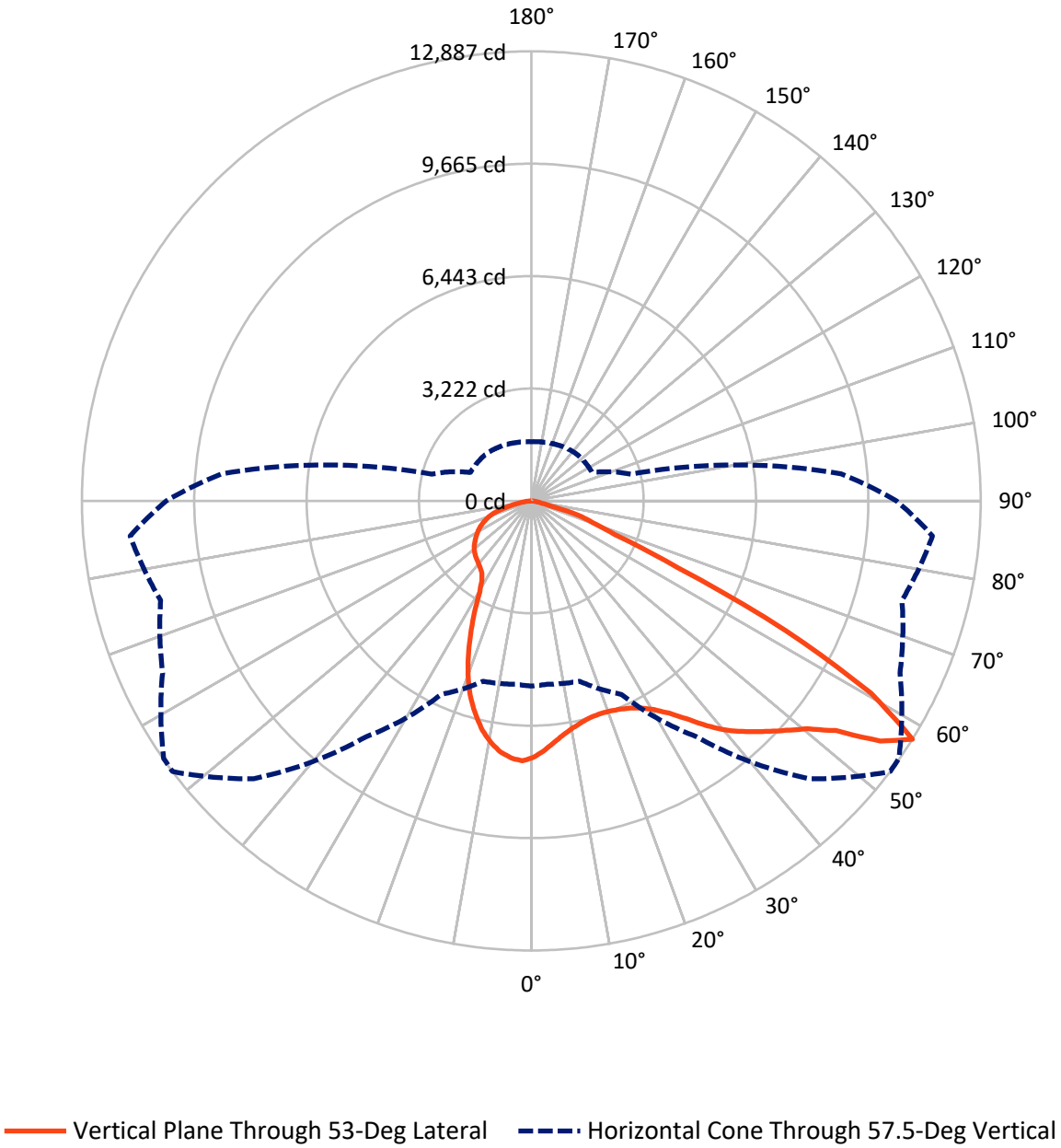
Luminous Intensity Polar Plot



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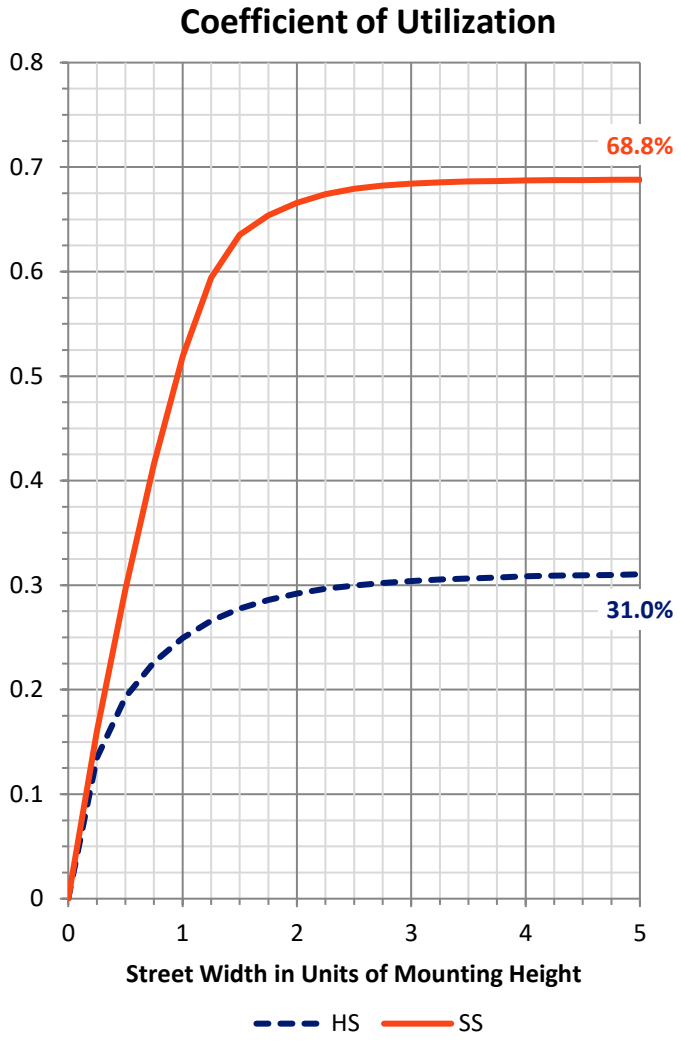
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7197.8	0.0	7197.8
	% Fixture	31.3	0.0	31.3
Street Side	Lumens	15823.0	0.0	15823.0
	% Fixture	68.7	0.0	68.7
Total	Lumens	23020.8	0.0	23020.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	664.8	2.9
10°-20°	1744.0	7.6
20°-30°	2569.6	11.2
30°-40°	3596.7	15.6
40°-50°	4728.2	20.5
50°-60°	5543.8	24.1
60°-70°	3265.9	14.2
70°-80°	812.4	3.5
80°-90°	95.3	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°	23020.8	100.0
0°-180°	23020.8	100.0



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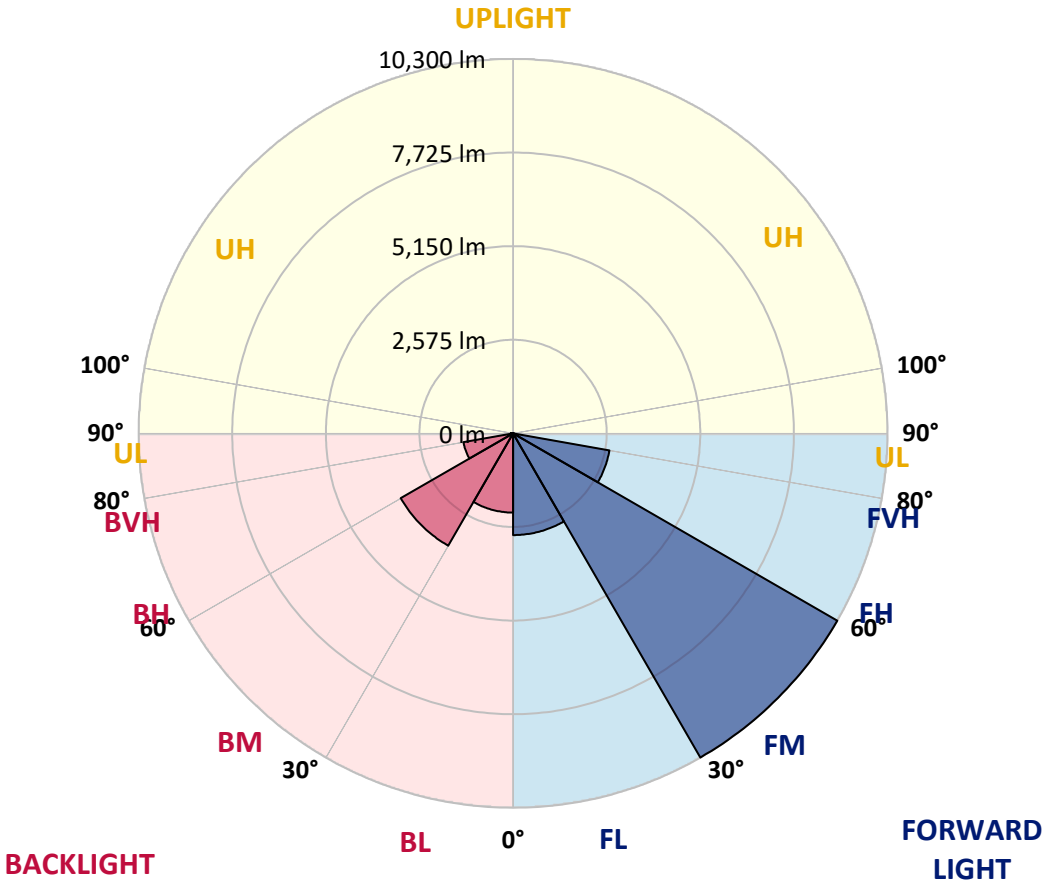
REPORT NUMBER: P638965
CATALOG NUMBER: GWS-SA4F-830-U-SL2-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2798.9	12.2			
FM	(30°-60°)	10299.7	44.7			
FH	(60°-80°)	2692.6	11.7			G2/5000
FVH	(80°-90°)	31.9	0.1			G1/100
BL	(0°-30°)	2179.5	9.5	B3/2500		
BM	(30°-60°)	3569.0	15.5	B3/5000		
BH	(60°-80°)	1385.8	6.0	B3/2500		G3/2500
BVH	(80°-90°)	63.4	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 II Short



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Scaled Data Report

REPORT NUMBER: P638965
CATALOG NUMBER: GWS-SA4F-830-U-SL2-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	7351.2	7351.2	7351.2	7351.2	7351.2	7351.2	*7351.2*	7351.2	7351.2	7351.2	7351.2
2.5°	6928.8	6948.1	6952.0	7012.1	7016.0	7103.2	*7161.3*	7149.7	7209.7	7283.3	7341.5
5°	6597.4	6599.4	6618.8	6690.4	6729.2	6843.5	*6940.4*	6940.4	7056.7	7207.8	7337.6
7.5°	6324.2	6322.3	6339.7	6419.2	6483.1	6620.7	*6752.5*	6768.0	6930.7	7151.6	7362.8
10°	6070.4	6084.0	6103.4	6200.2	6281.6	6452.1	*6609.1*	6634.3	6839.6	7112.8	7397.7
12.5°	5907.7	5909.6	5938.7	6047.2	6151.8	6333.9	*6498.6*	6529.6	6766.0	7076.0	7422.9
15°	5803.0	5805.0	5836.0	5956.1	6078.2	6262.2	*6430.8*	6465.7	6723.4	7070.2	7471.3
17.5°	5756.5	5754.6	5783.7	5903.8	6037.5	6229.3	*6409.5*	6452.1	6742.8	7114.8	7556.5
20°	5756.5	5758.5	5774.0	5882.5	6018.1	6221.6	*6430.8*	6483.1	6818.3	7215.5	7688.3
22.5°	5837.9	5845.7	5853.4	5927.0	6033.6	6233.2	*6487.0*	6556.8	6981.1	7384.1	7860.7
25°	5996.8	5998.7	6006.5	6066.6	6115.0	6266.1	*6580.0*	6684.6	7234.9	7630.2	8077.8
27.5°	6209.9	6237.1	6244.8	6283.6	6283.6	6347.5	*6725.3*	6876.5	7577.9	7984.8	8354.8
30°	6508.3	6518.0	6531.6	6574.2	6527.7	6500.6	*6938.5*	7132.2	7975.1	8413.0	8688.1
32.5°	6769.9	6791.2	6864.8	6934.6	6851.3	6766.0	*7252.3*	7481.0	8356.8	8858.6	9042.7
35°	6992.7	7045.0	7186.5	7341.5	7283.3	7198.1	*7668.9*	7907.2	8670.7	9178.3	9356.6
37.5°	7262.0	7302.7	7496.5	7748.4	7800.7	7760.0	*8176.6*	8347.1	8879.9	9259.7	9527.1
40°	7535.2	7597.2	7847.2	8195.9	8395.5	8424.6	*8645.5*	8759.8	8951.6	9100.8	9494.1
42.5°	7814.2	7920.8	8263.8	8670.7	9025.2	9091.1	*9040.7*	9089.2	8928.4	8881.8	9341.1
45°	8155.3	8281.2	8668.7	9188.0	9654.9	9757.6	*9428.2*	9383.7	8924.5	8798.5	9246.1
47.5°	8558.3	8684.2	9054.3	9658.8	10255.6	10331.2	*9825.4*	9744.1	9060.1	8926.4	9374.0
50°	8914.8	9002.0	9333.3	10009.5	10815.5	10860.1	*10263.3*	10164.5	9397.2	9281.0	9773.1
52.5°	8552.5	8542.8	8891.5	9724.7	11106.2	11642.9	*10937.6*	10842.7	10048.3	9870.0	10391.2
55°	7256.2	7145.8	7457.7	8277.3	10294.3	12338.5	*12146.7*	11956.8	10916.3	10462.9	10970.6
57.5°	*5305.1*	*5274.1*	*5349.6*	*6118.9*	*8246.3*	*11261.2*	*12886.8*	*12869.4*	*11666.1*	*11005.4*	*11548.0*
60°	4148.4	4101.8	3900.3	3921.7	5620.9	8796.6	*11183.7*	11697.1	12131.2	11330.9	11951.0
62.5°	3683.3	3648.5	3543.8	3255.1	3348.1	5898.0	*8197.9*	8668.7	10600.5	10007.6	10265.3
65°	3049.7	3040.1	3127.2	3115.6	2805.6	3257.1	*4626.9*	5101.6	6665.3	6748.6	6665.3
67.5°	2216.6	2199.1	2420.0	2856.0	2701.0	2458.8	*2578.9*	2743.6	3417.9	3069.1	2763.0
70°	1441.6	1416.4	1544.2	2063.5	2418.1	2143.0	*1858.1*	1831.0	1879.4	1168.4	1263.3
72.5°	966.9	937.8	935.8	1135.4	1460.9	1443.5	*1439.6*	1426.1	1273.0	922.3	1023.0
75°	538.6	515.4	509.6	490.2	523.1	532.8	*567.7*	587.1	635.5	699.5	775.0
77.5°	91.1	89.1	112.4	143.4	197.6	253.8	*313.9*	331.3	408.8	484.4	532.8
80°	50.4	52.3	67.8	83.3	110.4	151.1	*193.8*	205.4	251.9	292.6	331.3
82.5°	27.1	27.1	34.9	44.6	60.1	79.4	*104.6*	114.3	145.3	170.5	197.6
85°	9.7	9.7	13.6	17.4	25.2	32.9	*40.7*	46.5	63.9	87.2	98.8
87.5°	0.0	0.0	0.0	0.0	1.9	3.9	*7.8*	7.8	9.7	17.4	25.2
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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REPORT NUMBER: P638965
CATALOG NUMBER: GWS-SA4F-830-U-SL2-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7351.2	7351.2	7351.2	7351.2	7351.2	7351.2	7351.2	7351.2	7351.2	7351.2	7351.2
2.5°	7389.9	7337.6	7409.3	7442.2	7453.9	7461.6	7411.2	7376.4	7364.7	7327.9	7306.6
5°	7417.0	7382.2	7450.0	7450.0	7401.5	7351.2	7248.5	7176.8	7126.4	7066.3	7056.7
7.5°	7463.5	7438.4	7475.2	7399.6	7277.5	7141.9	6963.6	6824.1	6711.8	6638.1	6640.1
10°	7525.5	7494.5	7465.5	7296.9	7074.1	6824.1	6550.9	6347.5	6161.5	6076.2	6029.7
12.5°	7566.2	7521.7	7399.6	7120.6	6793.1	6457.9	6072.4	5770.1	5500.8	5378.7	5369.0
15°	7616.6	7535.2	7291.1	6892.0	6436.6	5979.4	5483.3	5062.9	4698.6	4508.7	4499.1
17.5°	7682.5	7548.8	7161.3	6630.4	6060.7	5386.5	4762.6	4233.6	3846.1	3698.8	3724.0
20°	7775.5	7564.3	7014.0	6339.7	5593.8	4712.2	3935.2	3448.9	3299.7	3290.0	3270.6
22.5°	7880.1	7574.0	6851.3	6014.2	5028.0	3993.3	3251.3	3043.9	3042.0	3090.4	3102.1
25°	7998.3	7581.7	6667.2	5634.5	4415.7	3276.4	2875.4	2813.4	2861.8	2952.9	2964.5
27.5°	8149.4	7597.2	6444.4	5217.9	3764.7	2830.8	2668.0	2652.5	2710.7	2795.9	2792.0
30°	8372.3	7653.4	6208.0	4739.3	3096.2	2619.6	2542.1	2544.0	2567.3	2608.0	2613.8
32.5°	8599.0	7740.6	5977.4	4200.7	2712.6	2499.5	2464.6	2460.7	2460.7	2478.2	2482.0
35°	8814.0	7839.4	5727.5	3638.8	2526.6	2429.7	2406.5	2394.8	2389.0	2385.2	2379.3
37.5°	8934.2	7887.9	5483.3	3084.6	2427.8	2383.2	2360.0	2344.5	2323.2	2307.7	2303.8
40°	8881.8	7831.7	5200.5	2670.0	2367.7	2338.7	2311.5	2290.2	2261.2	2247.6	2239.8
42.5°	8707.5	7657.3	4892.4	2474.3	2319.3	2290.2	2257.3	2222.4	2203.0	2191.4	2189.5
45°	8523.4	7446.1	4520.4	2360.0	2272.8	2237.9	2199.1	2160.4	2139.1	2133.3	2131.3
47.5°	8517.6	7341.5	4125.1	2268.9	2216.6	2181.7	2133.3	2094.5	2071.3	2063.5	2055.8
50°	8773.3	7448.0	3679.5	2189.5	2158.5	2121.6	2067.4	2024.8	1995.7	1986.0	1984.1
52.5°	9304.2	7849.1	3280.3	2110.0	2081.0	2038.3	1993.8	1951.1	1916.3	1898.8	1896.9
55°	9877.8	8358.7	3032.3	2028.6	1989.9	1953.1	1912.4	1865.9	1827.1	1800.0	1796.1
57.5°	*10470.7*	*8914.8*	*2956.7*	*1926.0*	*1896.9*	*1871.7*	*1823.3*	*1772.9*	*1728.3*	*1703.1*	*1697.3*
60°	10958.9	9393.4	3098.2	1817.4	1801.9	1769.0	1724.4	1676.0	1645.0	1625.6	1621.8
62.5°	9174.4	7647.6	2501.4	1699.3	1699.3	1664.4	1614.0	1579.1	1557.8	1544.2	1540.4
65°	5822.4	4735.4	1707.0	1581.1	1579.1	1532.6	1490.0	1466.7	1457.1	1435.7	1431.9
67.5°	2536.3	2164.3	1459.0	1460.9	1453.2	1402.8	1360.2	1342.7	1323.4	1300.1	1298.2
70°	1315.6	1340.8	1305.9	1327.2	1313.7	1253.6	1212.9	1185.8	1145.1	1121.9	1123.8
72.5°	1061.8	1088.9	1127.7	1160.6	1131.5	1083.1	1019.2	986.2	933.9	908.7	910.7
75°	809.9	839.0	875.8	910.7	887.4	827.3	786.7	753.7	693.7	664.6	670.4
77.5°	558.0	573.5	618.1	616.1	608.4	591.0	530.9	492.1	430.1	395.3	399.1
80°	346.8	356.5	377.8	387.5	383.6	360.4	311.9	282.9	246.1	224.8	226.7
82.5°	209.3	215.1	234.4	236.4	234.4	217.0	180.2	158.9	135.6	124.0	124.0
85°	106.6	110.4	122.1	122.1	110.4	93.0	83.3	73.6	60.1	54.3	54.3
87.5°	29.1	29.1	36.8	31.0	25.2	23.3	11.6	9.7	3.9	1.9	1.9
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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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

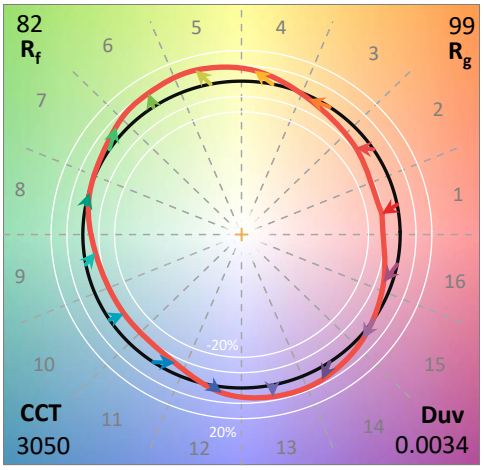
Test Information

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

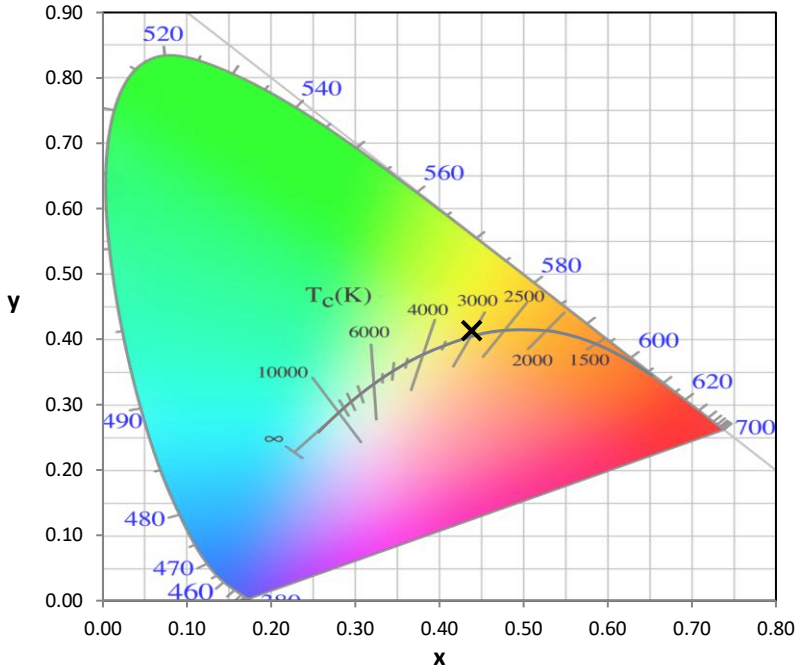
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

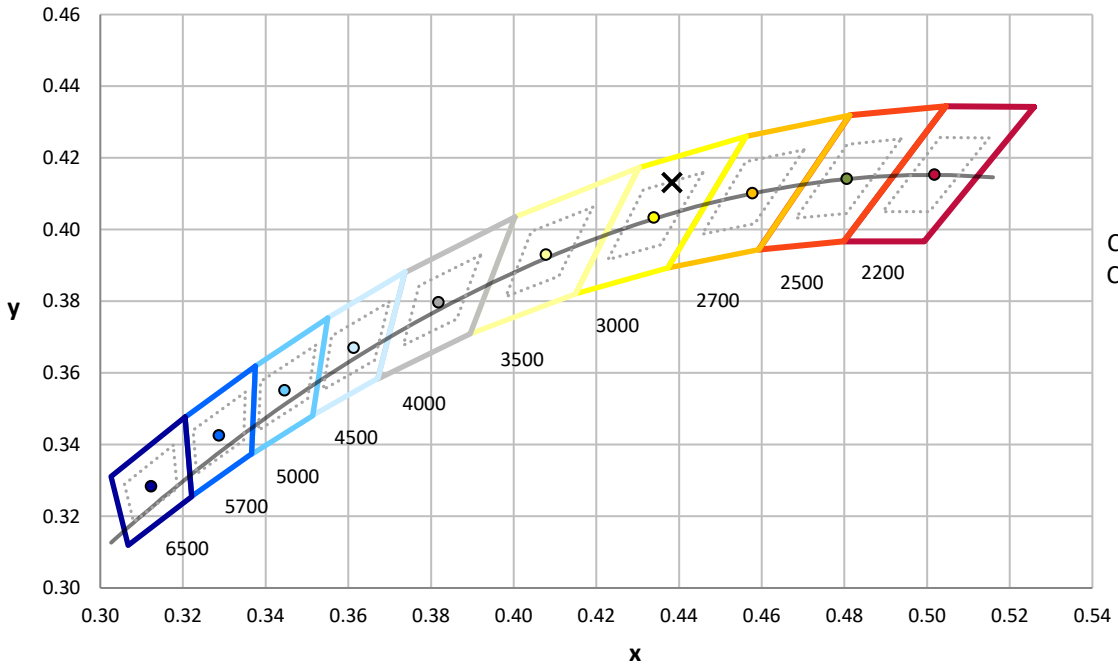
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

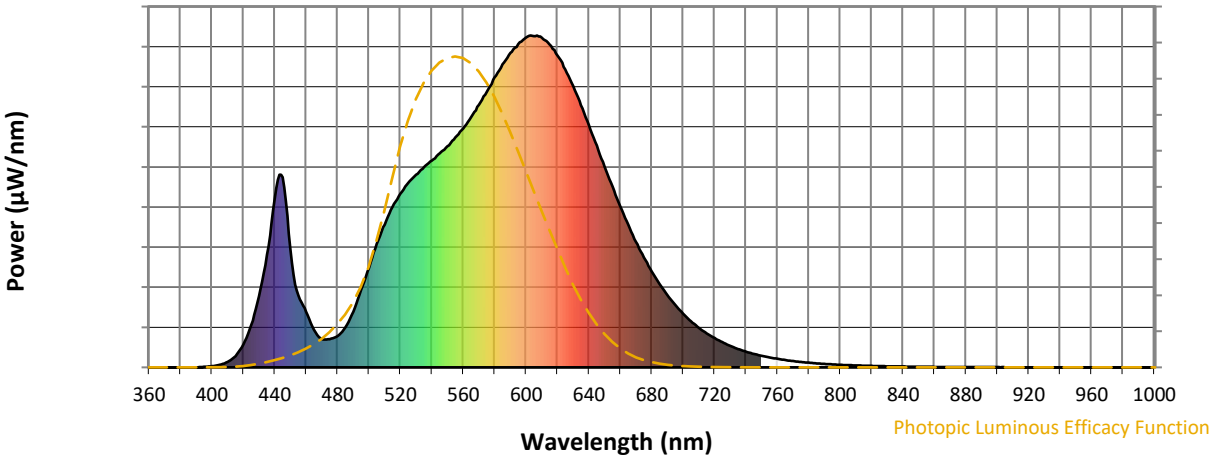


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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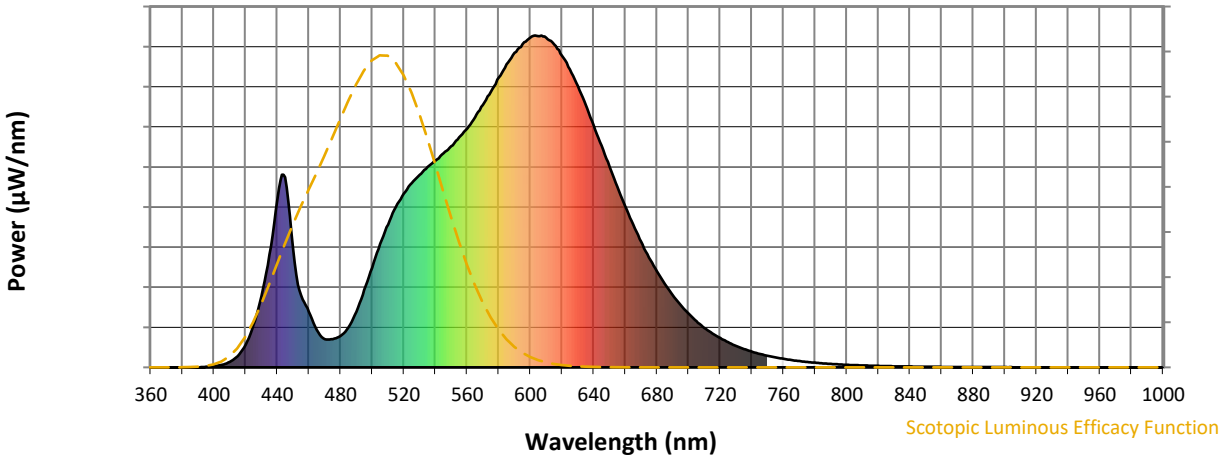
Scotopic Flux vs. Wavelength



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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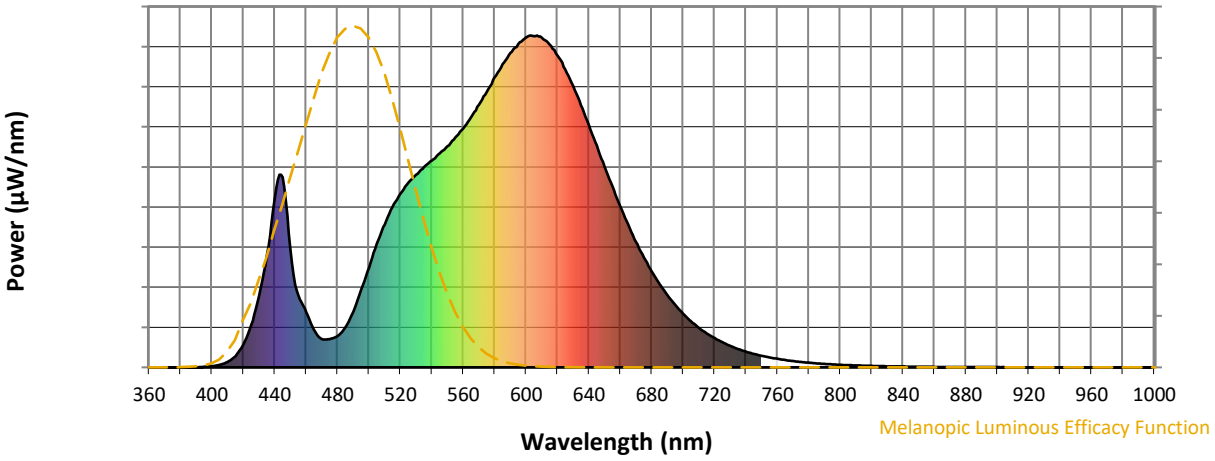
Melanopic Flux vs. Wavelength



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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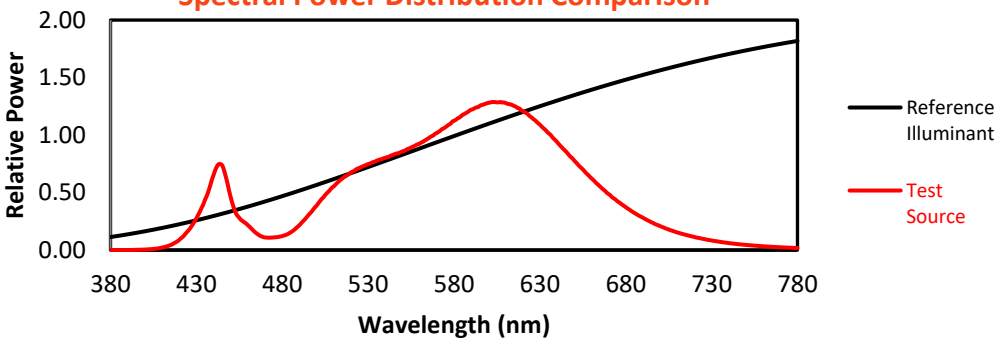
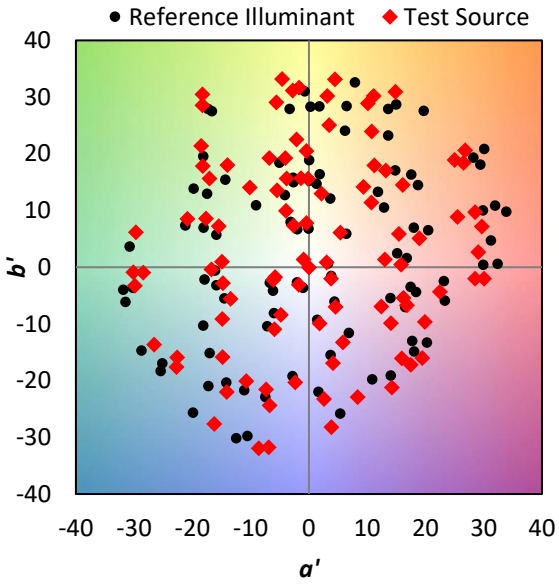
Summary

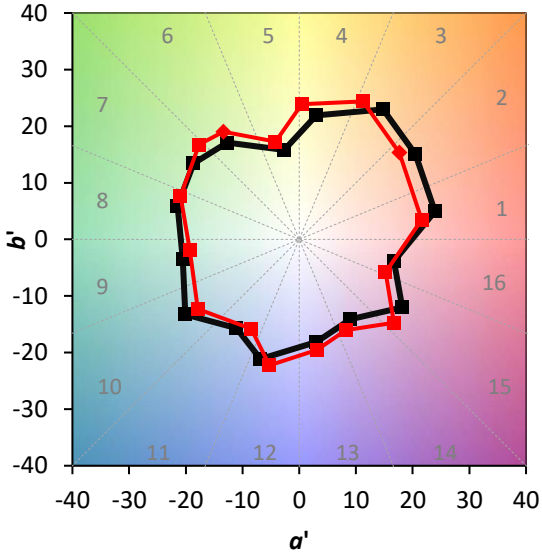
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

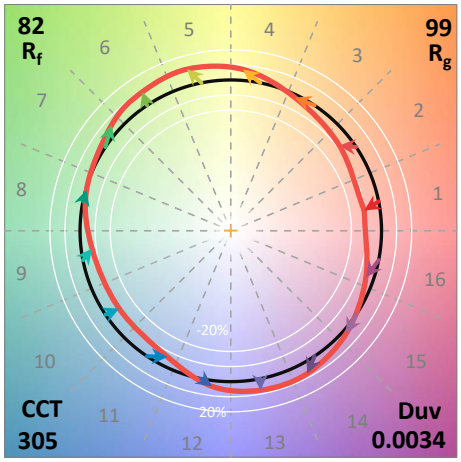
Spectral Power Distribution Comparison

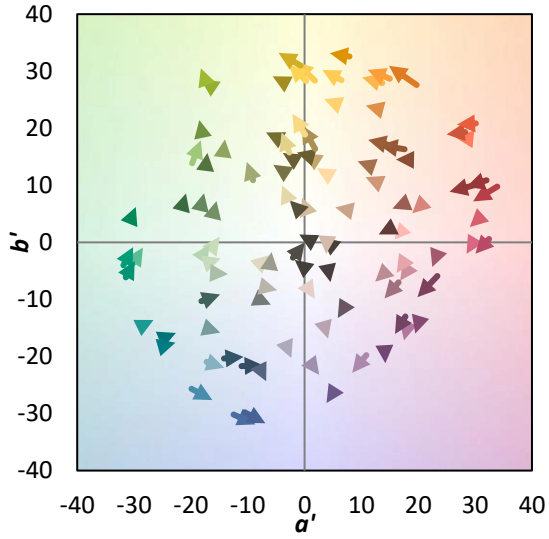


Color Vector Graphics









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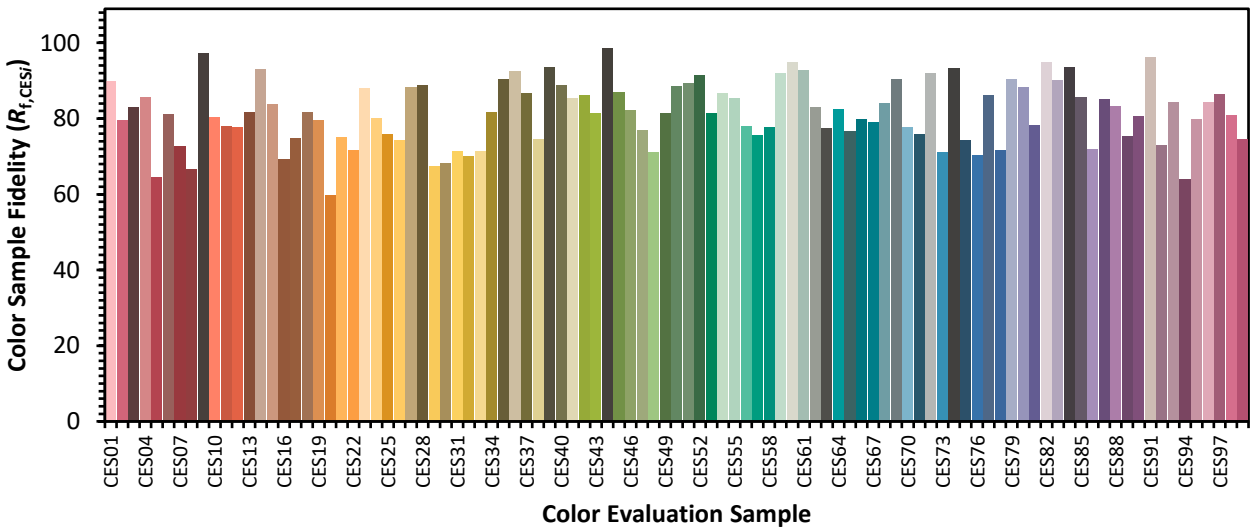
Individual Sample Fidelity Index ($R_{f,i}$)

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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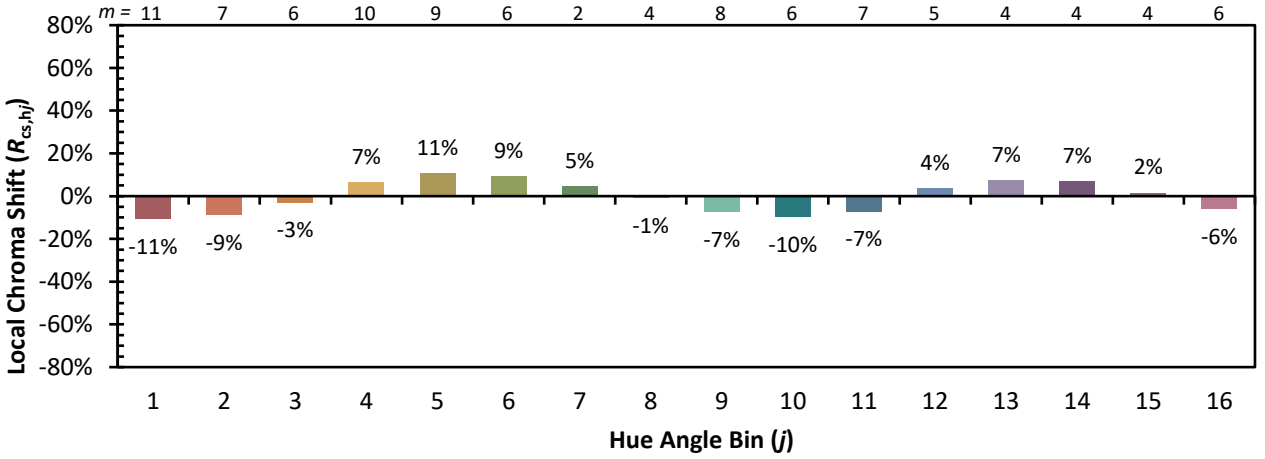
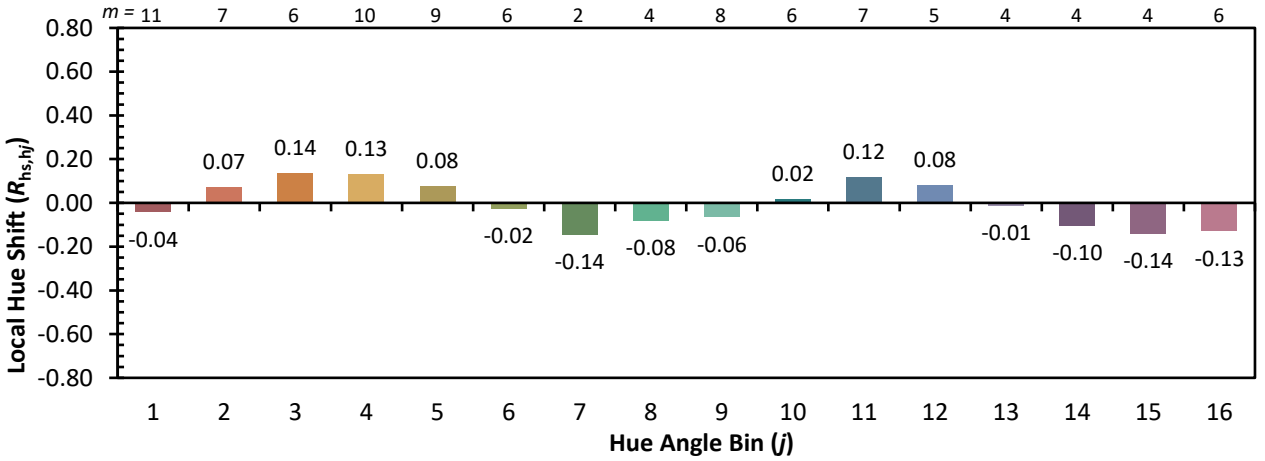
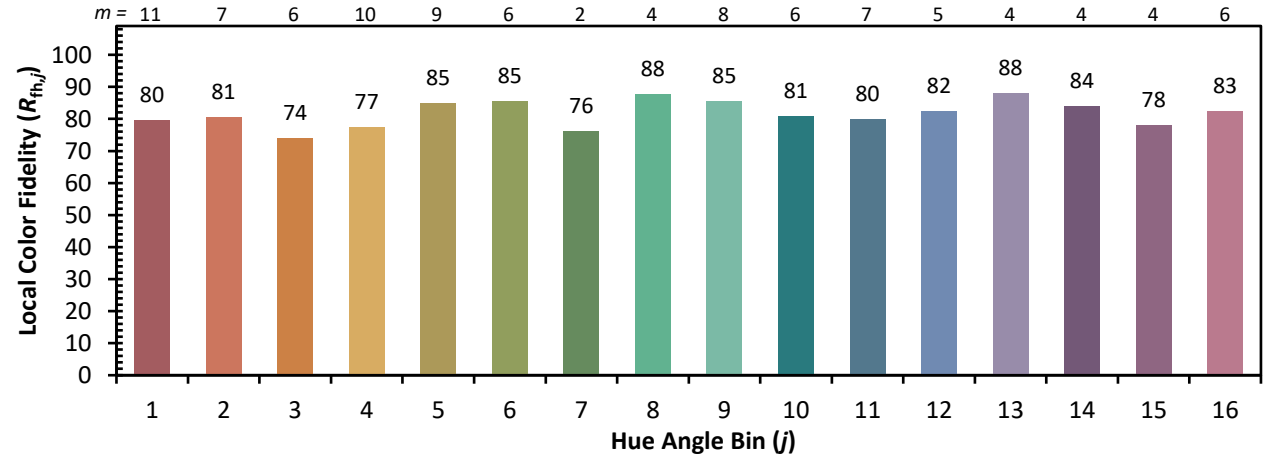
Color Rendition by Hue-Angle Bin







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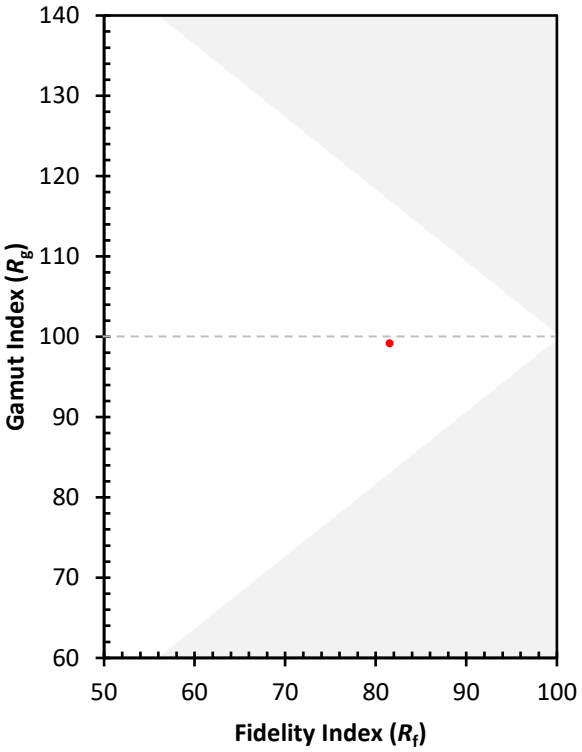
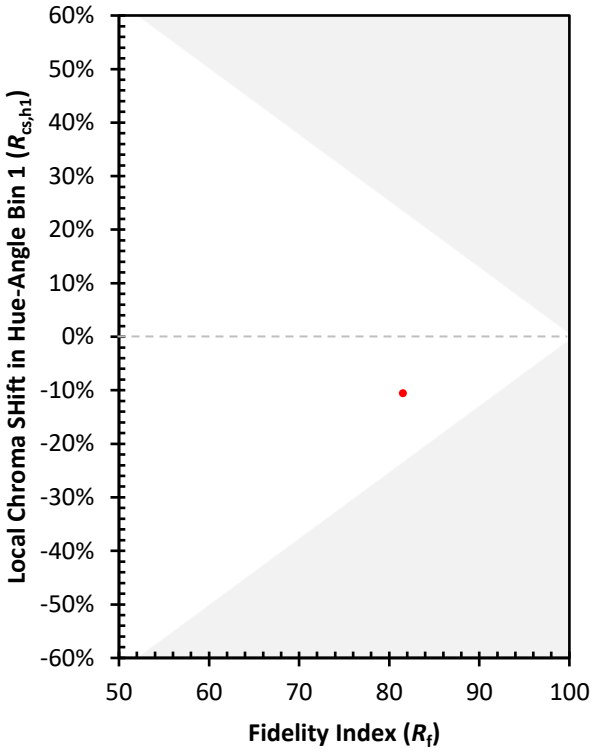
Measure Comparisons





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