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: P638474

Luminaire Tested: GWS-SA4E-830-U-SL3-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:	P638474
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-33)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4E-830-U-SL3-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III 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:	20358.7 lumens
Efficiency:	N/A
Efficacy:	100.5 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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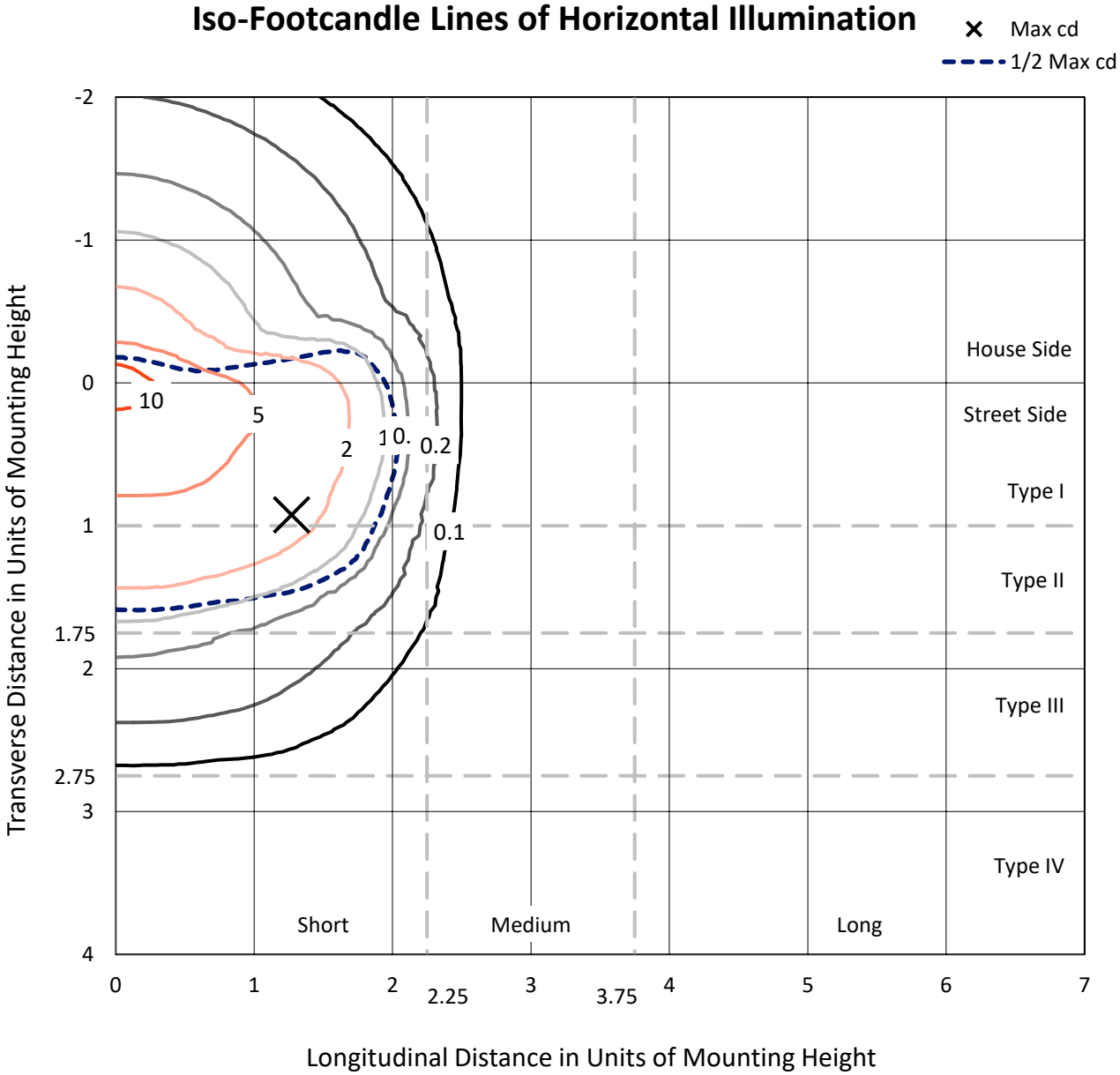
Scaled Data Report

REPORT NUMBER: P638474
CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 12.5 fc
Type II - Short - N/A

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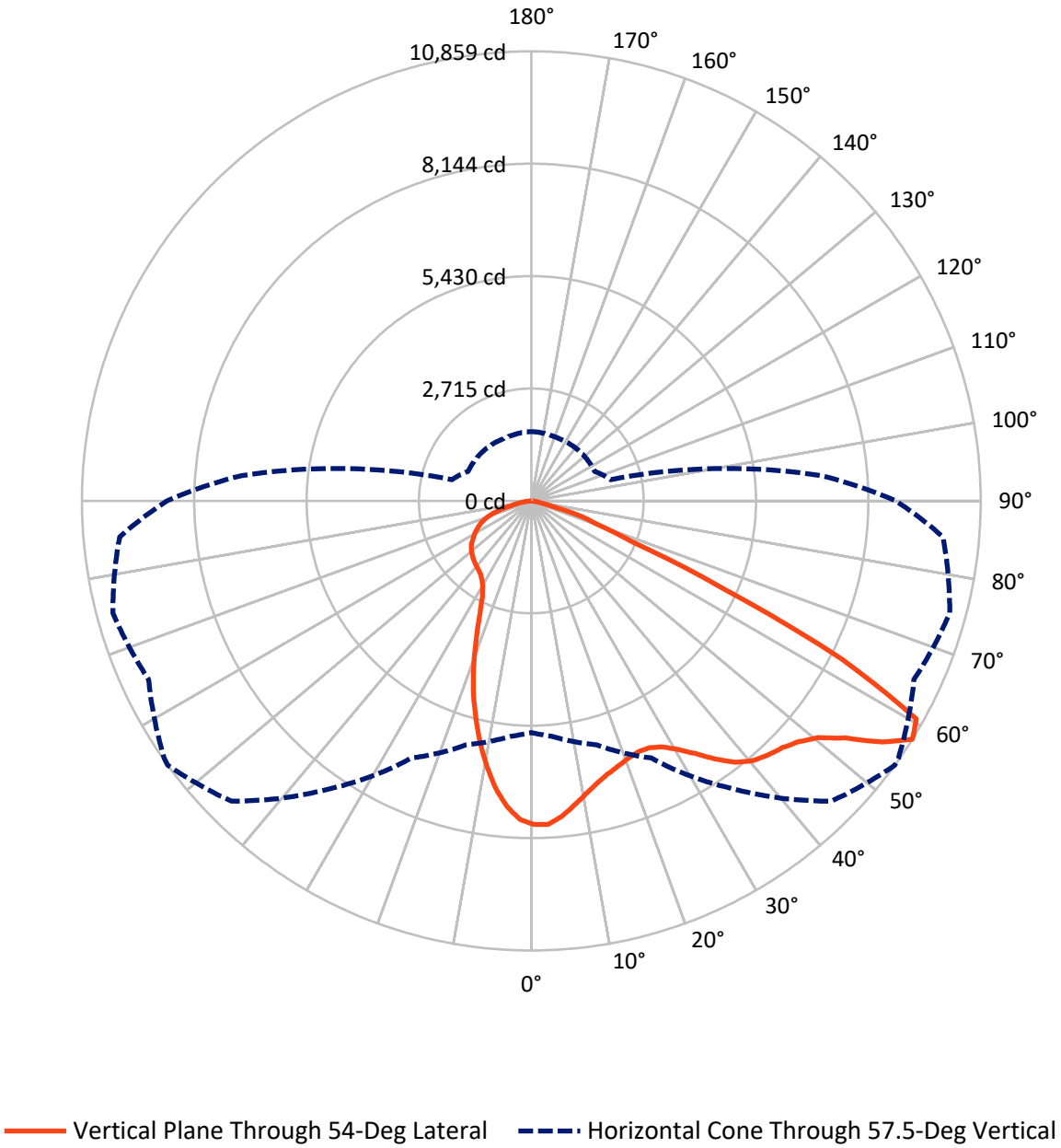
CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSWH

Luminous Intensity Polar Plot



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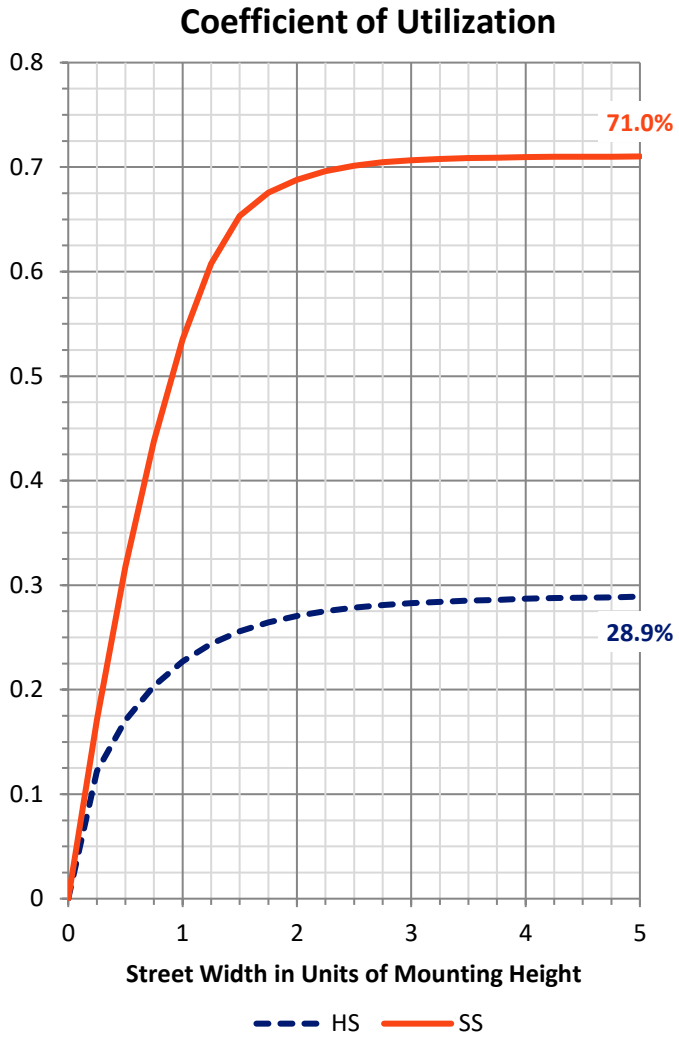
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5918.5	0.0	5918.5
	% Fixture	29.1	0.0	29.1
Street Side	Lumens	14440.2	0.0	14440.2
	% Fixture	70.9	0.0	70.9
Total	Lumens	20358.7	0.0	20358.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	687.0	3.4
10°-20°	1639.3	8.1
20°-30°	2268.6	11.1
30°-40°	3152.2	15.5
40°-50°	4163.1	20.4
50°-60°	4947.3	24.3
60°-70°	2740.9	13.5
70°-80°	682.5	3.4
80°-90°	77.6	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°	20358.7	100.0
0°-180°	20358.7	100.0



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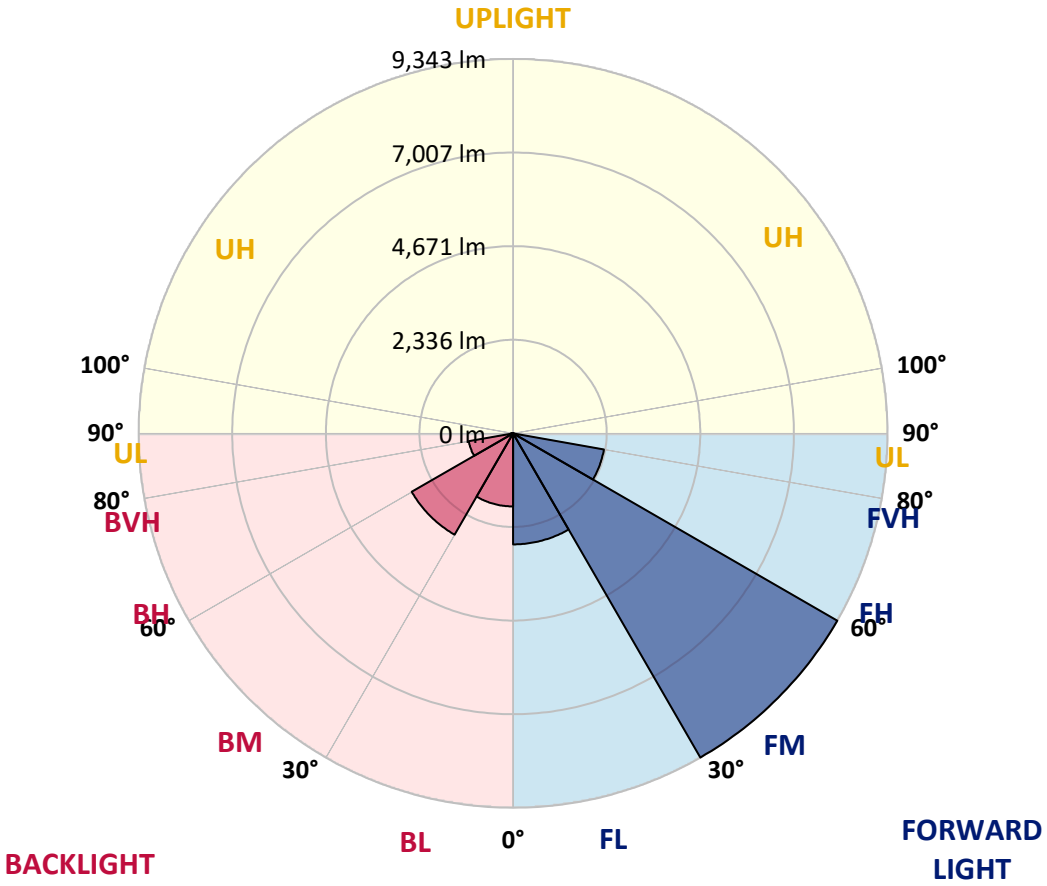
REPORT NUMBER: P638474
CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2771.1	13.6			
FM	(30°-60°)	9342.9	45.9			
FH	(60°-80°)	2301.8	11.3			G2/5000
FVH	(80°-90°)	24.3	0.1			G1/100
BL	(0°-30°)	1823.8	9.0	B3/2500		
BM	(30°-60°)	2919.7	14.3	B3/5000		
BH	(60°-80°)	1121.6	5.5	B3/2500		G3/2500
BVH	(80°-90°)	53.3	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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REPORT NUMBER: P638474
CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2
2.5°	7669.8	7685.5	7695.9	7732.5	7763.9	7791.8	7821.4	7821.4	7819.7	7814.4	7804.0
5°	7366.5	7384.0	7408.4	7458.9	7526.9	7575.7	7655.8	7662.8	7697.7	7711.6	7704.6
7.5°	7014.5	7019.7	7051.1	7117.3	7225.4	7312.5	7427.5	7441.5	7525.1	7573.9	7565.2
10°	6629.4	6611.9	6667.7	6765.3	6906.5	7052.8	7201.0	7213.2	7347.4	7439.7	7432.8
12.5°	6277.3	6279.1	6334.8	6453.3	6629.4	6810.6	7009.3	7037.2	7202.7	7321.2	7309.0
15°	5982.8	5989.8	6057.7	6191.9	6392.4	6608.5	6855.9	6882.1	7091.2	7248.0	7213.2
17.5°	5747.5	5754.5	5813.8	5967.1	6181.5	6442.9	6744.4	6770.5	7030.2	7216.7	7145.2
20°	5585.5	5582.0	5639.5	5785.9	6007.2	6291.3	6646.8	6685.1	7011.0	7228.9	7099.9
22.5°	5519.2	5517.5	5559.3	5679.6	5887.0	6174.5	6587.5	6639.8	7031.9	7282.9	7072.0
25°	5552.4	5545.4	5582.0	5670.9	5836.4	6129.2	6605.0	6660.7	7120.8	7394.4	7077.2
27.5°	5655.2	5646.5	5677.8	5758.0	5883.5	6176.3	6727.0	6791.4	7309.0	7598.3	7147.0
30°	5812.0	5806.8	5838.2	5914.8	6024.6	6333.1	6960.5	7033.7	7600.1	7915.5	7298.6
32.5°	5995.0	5986.3	6042.1	6130.9	6258.2	6618.9	7274.2	7370.0	7945.1	8323.3	7553.0
35°	6200.7	6193.7	6270.4	6399.3	6582.3	7016.3	7654.1	7758.7	8297.2	8785.1	7891.1
37.5°	6401.1	6401.1	6549.2	6740.9	6970.9	7448.5	8011.4	8077.6	8541.1	9194.7	8253.6
40°	6578.8	6589.3	6812.4	7099.9	7392.7	7838.8	8246.6	8302.4	8649.2	9477.0	8569.0
42.5°	6775.8	6784.5	7044.1	7420.6	7769.1	8154.3	8389.5	8417.4	8670.1	9618.2	8792.1
45°	6932.6	6944.8	7267.2	7669.8	8096.7	8391.3	8502.8	8527.2	8699.7	9694.8	8954.2
47.5°	7014.5	7031.9	7401.4	7870.2	8318.1	8603.9	8689.3	8699.7	8821.7	9829.0	9149.4
50°	7000.6	7035.4	7451.9	7969.5	8481.9	8818.2	8989.0	9006.5	9070.9	10026.0	9377.7
52.5°	7124.3	7140.0	7560.0	8088.0	8715.4	9213.8	9510.1	9534.5	9504.9	10174.1	9513.6
55°	6918.7	6993.6	7425.8	8070.6	9070.9	9825.5	10282.1	10269.9	9898.7	10339.6	9740.1
57.5°	5595.9	5705.7	6101.3	6850.7	8485.4	10254.3	10859.0	10829.4	10203.7	10466.9	9985.9
60°	3874.1	3891.5	4248.8	4780.3	6549.2	9058.7	10689.9	10754.4	10259.5	10306.5	9531.0
62.5°	3098.6	3093.4	3126.5	3140.4	4165.1	6368.0	8438.3	8673.6	8523.7	8030.5	6754.8
65°	2645.5	2664.6	2762.2	2711.7	2718.7	3586.5	5041.7	5074.8	4970.3	4792.5	3572.6
67.5°	2070.4	2103.5	2276.0	2472.9	2410.2	2309.1	2615.8	2600.2	2049.5	1585.9	1310.5
70°	1296.6	1317.5	1502.2	1941.4	2098.3	1896.1	1681.7	1674.8	1097.9	902.7	989.9
72.5°	756.3	759.8	812.1	1082.2	1392.4	1296.6	1237.3	1192.0	705.8	719.7	789.5
75°	416.5	416.5	414.8	467.1	549.0	486.2	470.5	458.3	472.3	535.0	587.3
77.5°	87.1	88.9	94.1	123.7	160.3	195.2	245.7	247.5	308.5	357.3	399.1
80°	40.1	41.8	52.3	66.2	85.4	113.3	149.9	151.6	186.5	224.8	252.7
82.5°	20.9	22.7	27.9	34.9	45.3	59.3	83.7	83.7	111.5	132.4	149.9
85°	7.0	7.0	10.5	13.9	19.2	24.4	33.1	33.1	48.8	64.5	74.9
87.5°	0.0	0.0	0.0	0.0	1.7	3.5	7.0	7.0	8.7	10.5	17.4
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: P638474
CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2	7816.2
2.5°	7781.3	7727.3	7729.0	7739.5	7706.4	7655.8	7622.7	7580.9	7554.8	7549.5	7568.7
5°	7669.8	7607.0	7563.5	7518.2	7424.1	7312.5	7225.4	7153.9	7106.9	7089.4	7068.5
7.5°	7516.4	7434.5	7324.7	7197.5	7026.7	6828.0	6688.6	6557.9	6467.3	6441.1	6429.0
10°	7363.1	7244.6	7049.4	6812.4	6528.3	6259.9	6007.2	5813.8	5660.4	5573.3	5601.2
12.5°	7204.5	7058.1	6753.1	6388.9	5993.3	5589.0	5257.8	4937.2	4689.7	4566.0	4529.4
15°	7065.0	6866.4	6441.1	5948.0	5421.6	4912.8	4433.5	3952.5	3638.8	3468.0	3421.0
17.5°	6946.5	6688.6	6111.8	5498.3	4869.2	4144.2	3555.2	3109.0	2894.7	2800.6	2793.6
20°	6829.8	6514.3	5785.9	5013.8	4231.4	3419.2	2892.9	2683.8	2607.1	2574.0	2572.3
22.5°	6725.2	6331.4	5442.6	4529.4	3597.0	2873.8	2584.5	2493.9	2472.9	2472.9	2469.5
25°	6636.3	6148.4	5090.5	4015.3	3023.6	2558.3	2424.1	2385.8	2394.5	2410.2	2411.9
27.5°	6599.7	6005.5	4750.7	3487.2	2628.0	2375.3	2314.4	2309.1	2333.5	2357.9	2361.4
30°	6638.1	5907.9	4402.1	2981.8	2391.0	2263.8	2235.9	2246.4	2276.0	2300.4	2300.4
32.5°	6756.6	5859.1	4046.6	2612.4	2253.4	2185.4	2176.7	2187.1	2209.8	2223.7	2225.5
35°	6957.0	5878.2	3678.9	2363.1	2164.5	2127.9	2126.1	2133.1	2141.8	2150.5	2152.3
37.5°	7209.7	5963.6	3285.1	2218.5	2107.0	2086.1	2082.6	2080.8	2082.6	2082.6	2084.3
40°	7457.2	6092.6	2933.0	2133.1	2066.9	2049.5	2040.7	2028.5	2026.8	2023.3	2021.6
42.5°	7640.2	6191.9	2652.4	2072.1	2030.3	2009.4	1998.9	1979.7	1978.0	1976.3	1974.5
45°	7777.8	6275.6	2418.9	2012.9	1991.9	1972.8	1950.1	1932.7	1936.2	1939.7	1939.7
47.5°	7932.9	6348.8	2248.1	1957.1	1944.9	1925.7	1897.8	1885.6	1897.8	1910.0	1910.0
50°	8121.1	6451.6	2108.7	1901.3	1896.1	1873.4	1849.0	1843.8	1857.8	1875.2	1875.2
52.5°	8258.8	6540.5	2009.4	1845.6	1845.6	1815.9	1795.0	1793.3	1809.0	1826.4	1828.1
55°	8516.7	6747.9	1974.5	1781.1	1774.1	1751.4	1735.8	1723.6	1742.7	1758.4	1758.4
57.5°	*8807.8*	*7023.2*	*1983.2*	*1688.7*	*1680.0*	*1673.0*	*1660.8*	*1646.9*	*1652.1*	*1669.5*	*1671.3*
60°	8190.9	6489.9	1887.4	1596.3	1591.1	1587.6	1571.9	1547.5	1554.5	1568.5	1570.2
62.5°	5721.4	4313.3	1526.6	1481.3	1498.8	1497.0	1476.1	1448.2	1450.0	1469.1	1469.1
65°	2969.6	2333.5	1340.2	1376.8	1402.9	1392.4	1357.6	1333.2	1329.7	1354.1	1348.9
67.5°	1280.9	1273.9	1219.9	1267.0	1294.9	1272.2	1235.6	1195.5	1199.0	1207.7	1200.7
70°	1031.7	1063.1	1085.7	1136.3	1158.9	1117.1	1077.0	1054.4	1035.2	1033.4	1021.2
72.5°	824.3	867.9	918.4	970.7	977.7	935.8	885.3	864.4	834.8	833.0	820.8
75°	620.4	657.0	697.1	738.9	738.9	698.8	665.7	655.3	620.4	610.0	599.5
77.5°	423.5	446.1	477.5	488.0	498.4	482.7	449.6	432.2	392.1	381.7	367.7
80°	266.6	282.3	301.5	308.5	318.9	299.8	273.6	254.4	226.6	217.8	210.9
82.5°	160.3	170.8	183.0	186.5	195.2	181.2	156.8	142.9	127.2	120.2	115.0
85°	81.9	87.1	94.1	95.9	94.1	80.2	71.5	64.5	54.0	52.3	48.8
87.5°	20.9	24.4	26.1	24.4	22.7	17.4	12.2	8.7	3.5	3.5	1.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

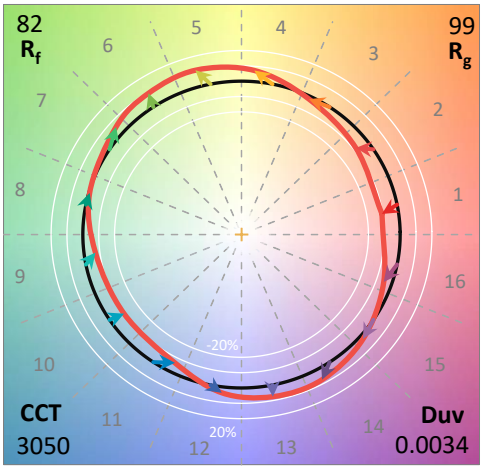
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2408-195-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	08/07/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**GALN-SB1A-830-U-5WQ**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K):	3050	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

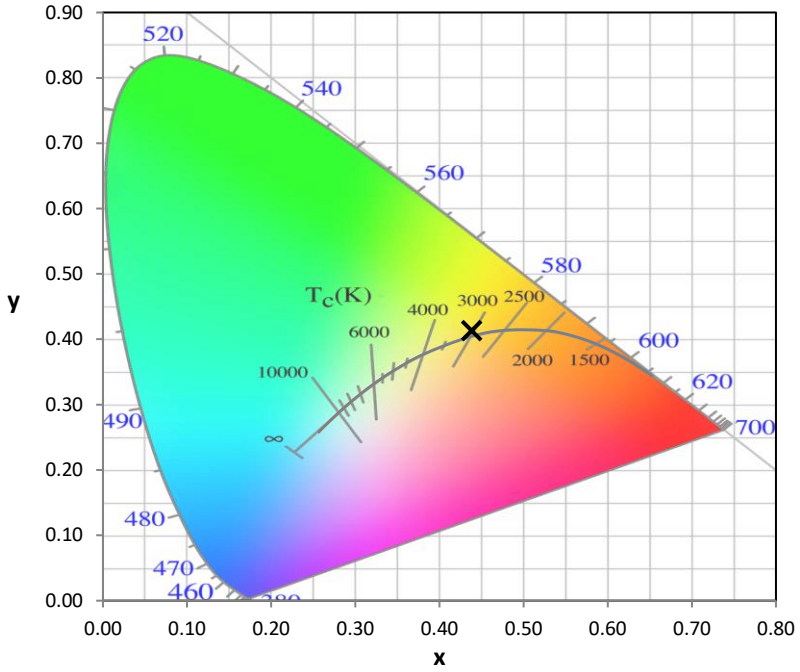
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

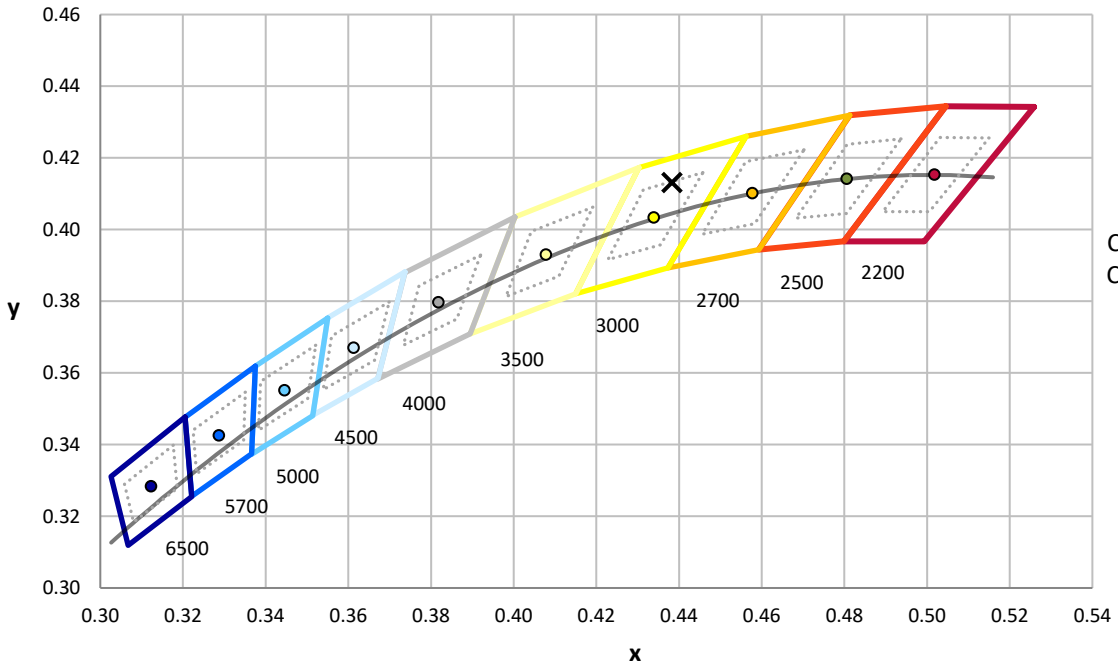
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

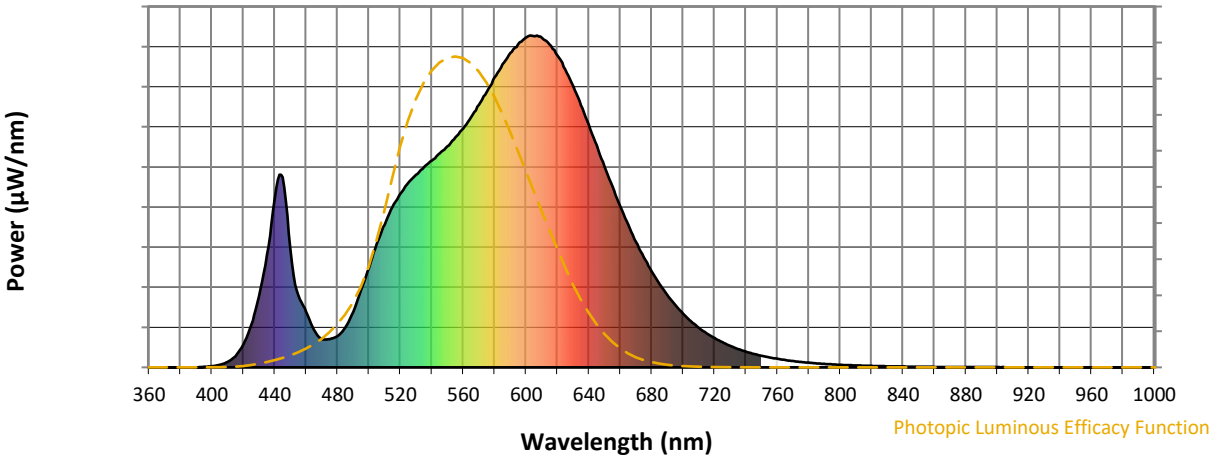


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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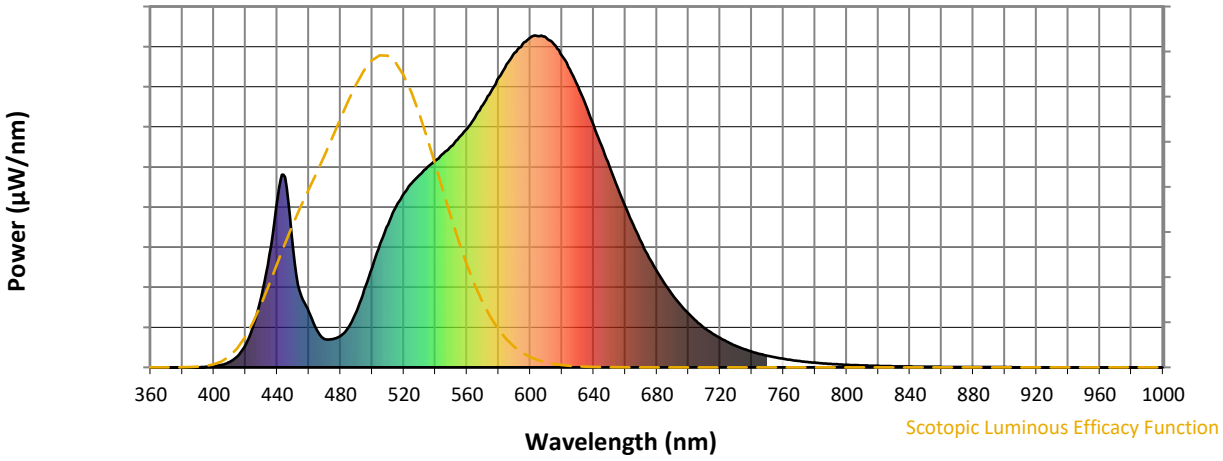
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.27**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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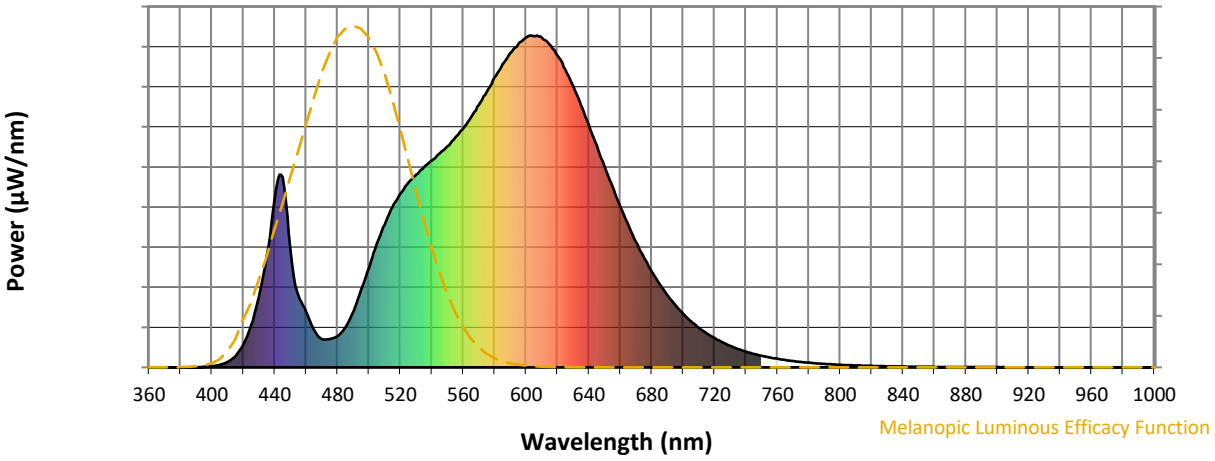
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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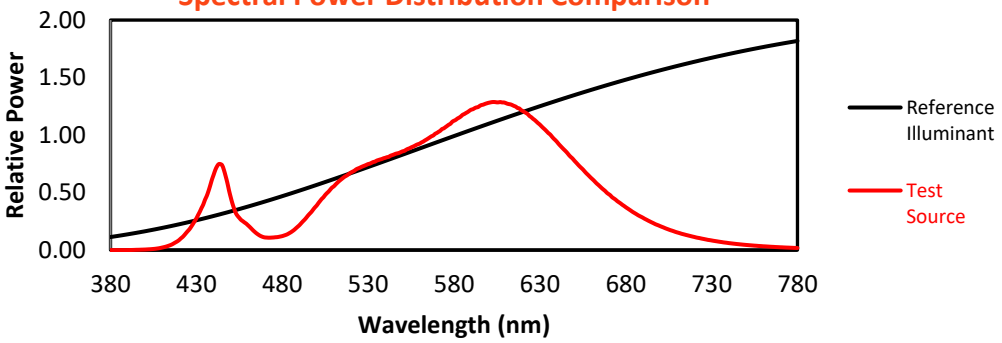
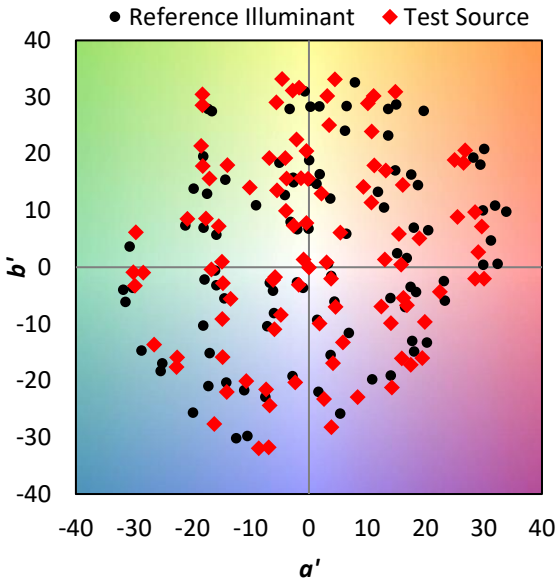
Summary

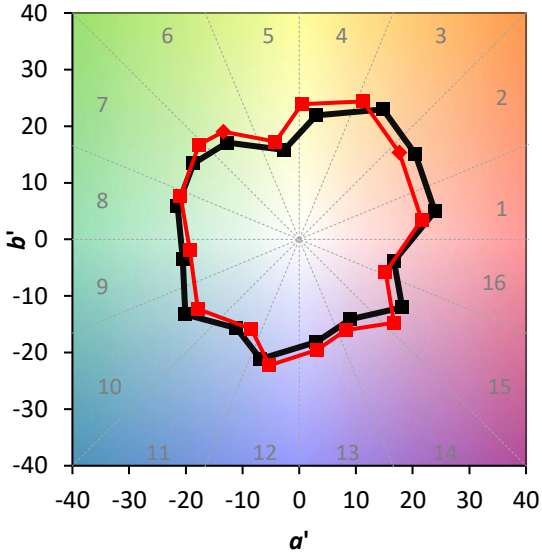
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

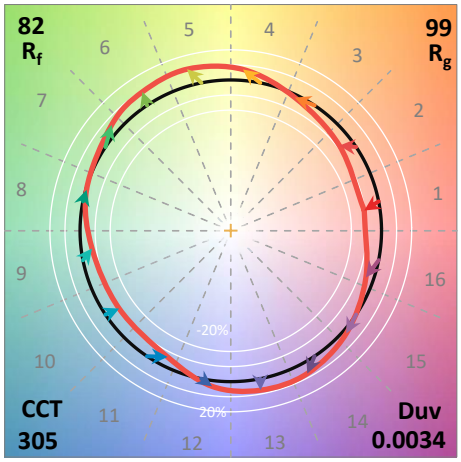
Spectral Power Distribution Comparison

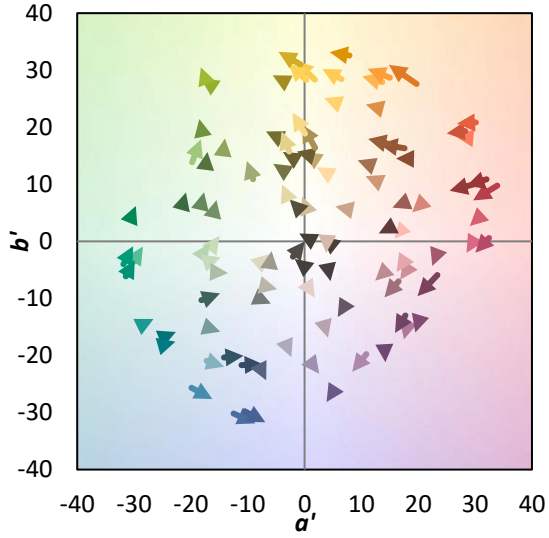


Color Vector Graphics









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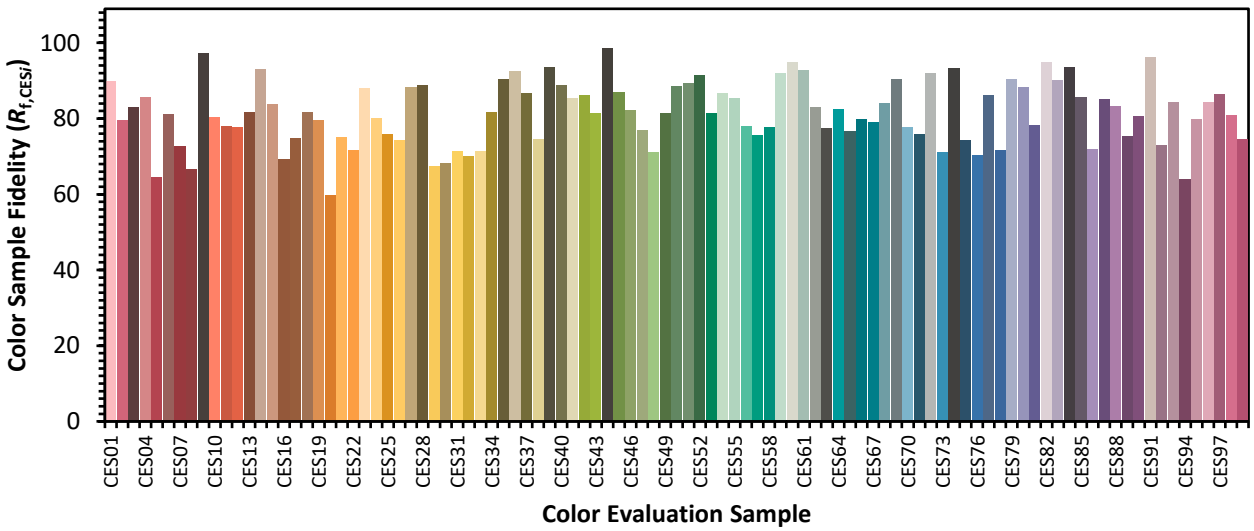
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



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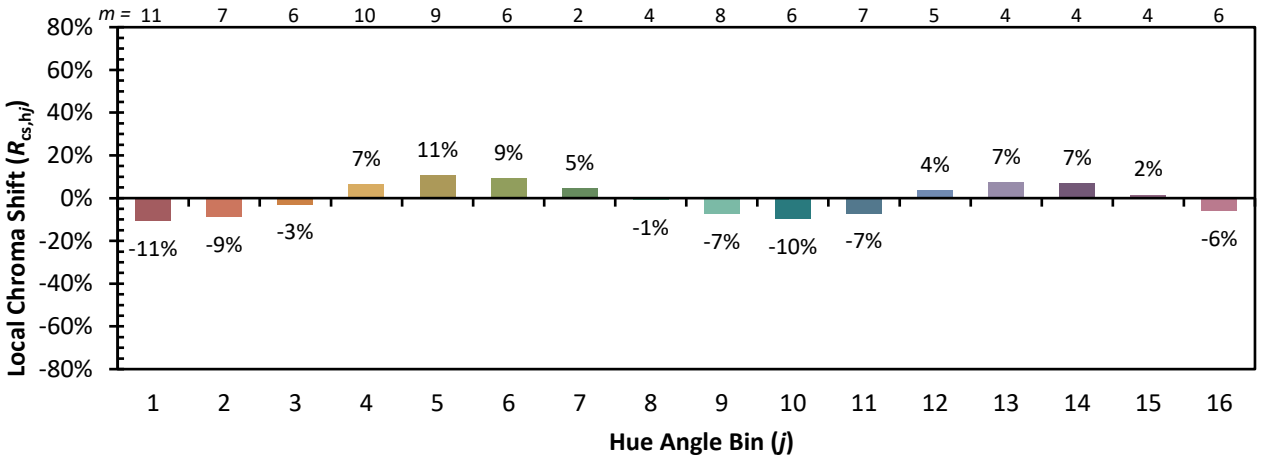
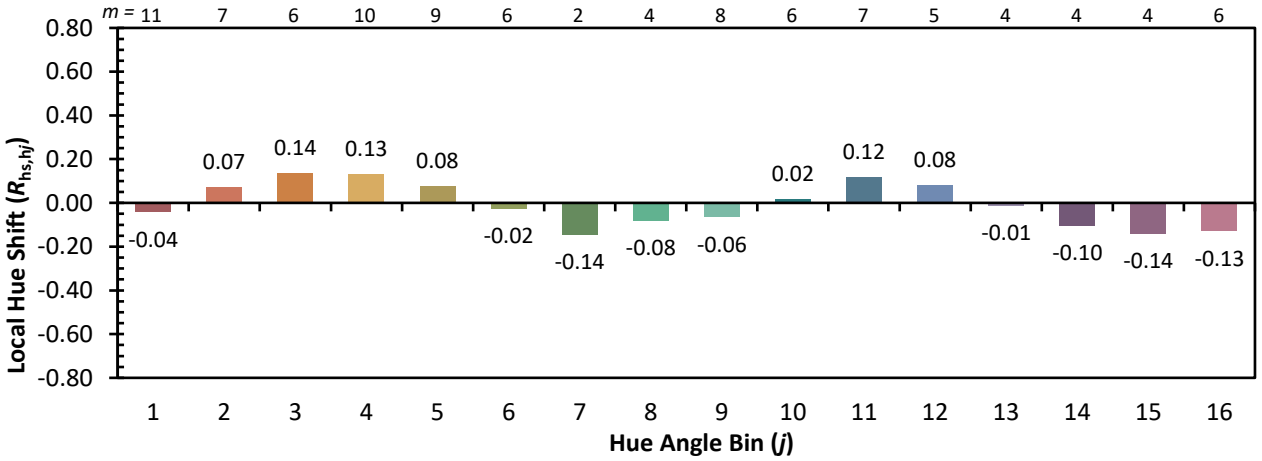
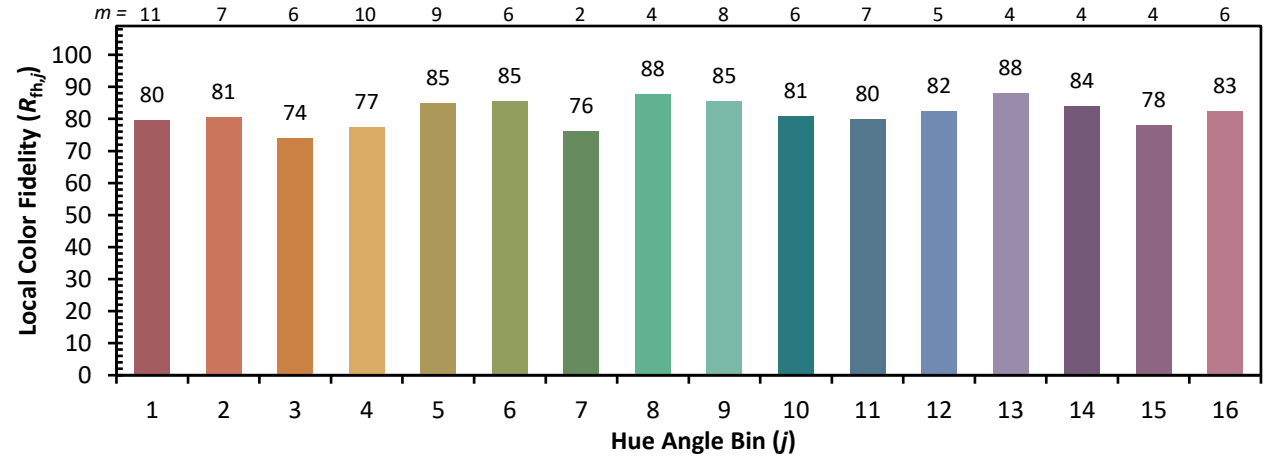
Color Rendition by Hue-Angle Bin







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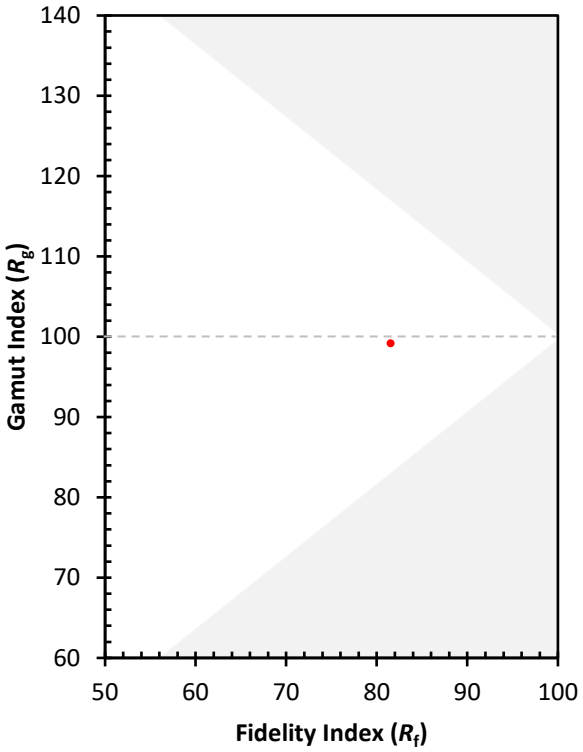
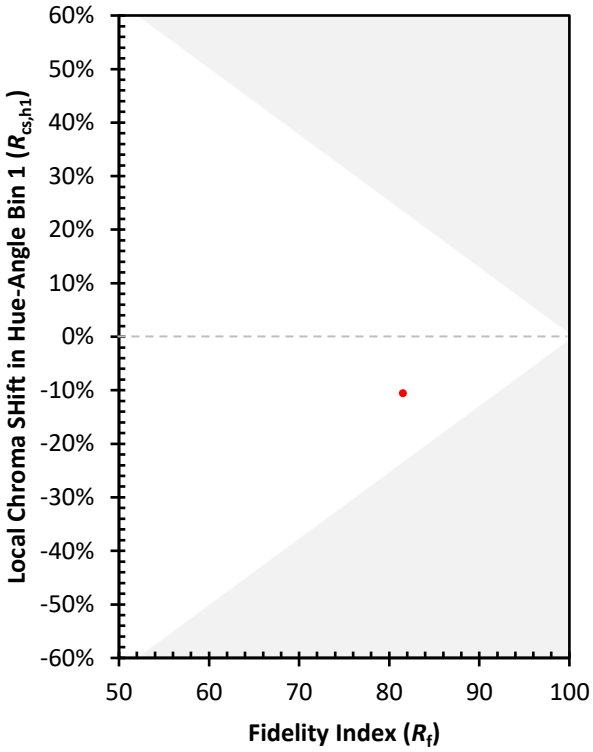
Measure Comparisons





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