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: P638470

Luminaire Tested: GWS-SA4E-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:	P638470
	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-SA4E-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:	20705.5 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):	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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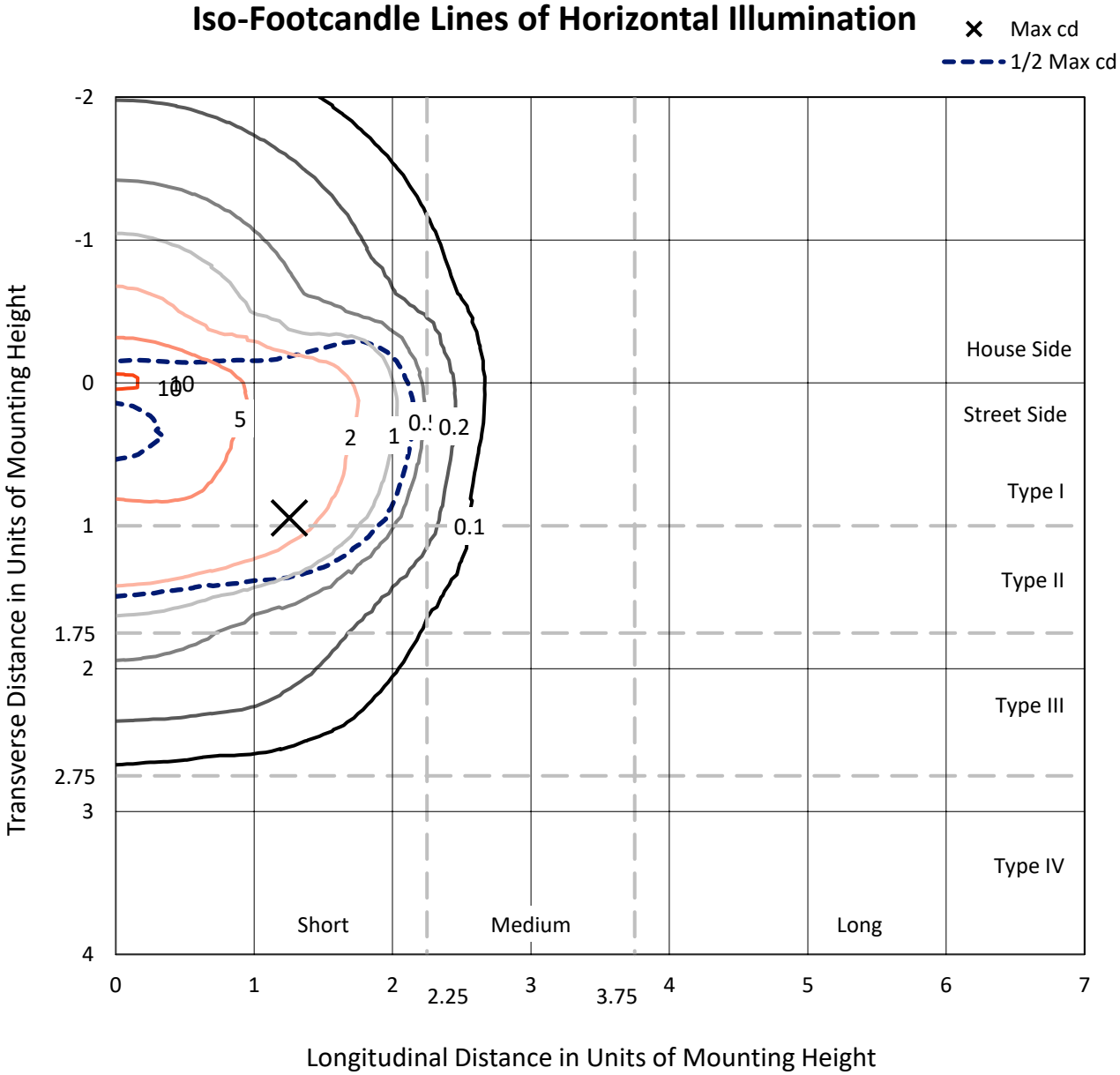
Scaled Data Report

REPORT NUMBER: P638470
CATALOG NUMBER: GWS-SA4E-830-U-SL2-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
Type II - Short - N/A

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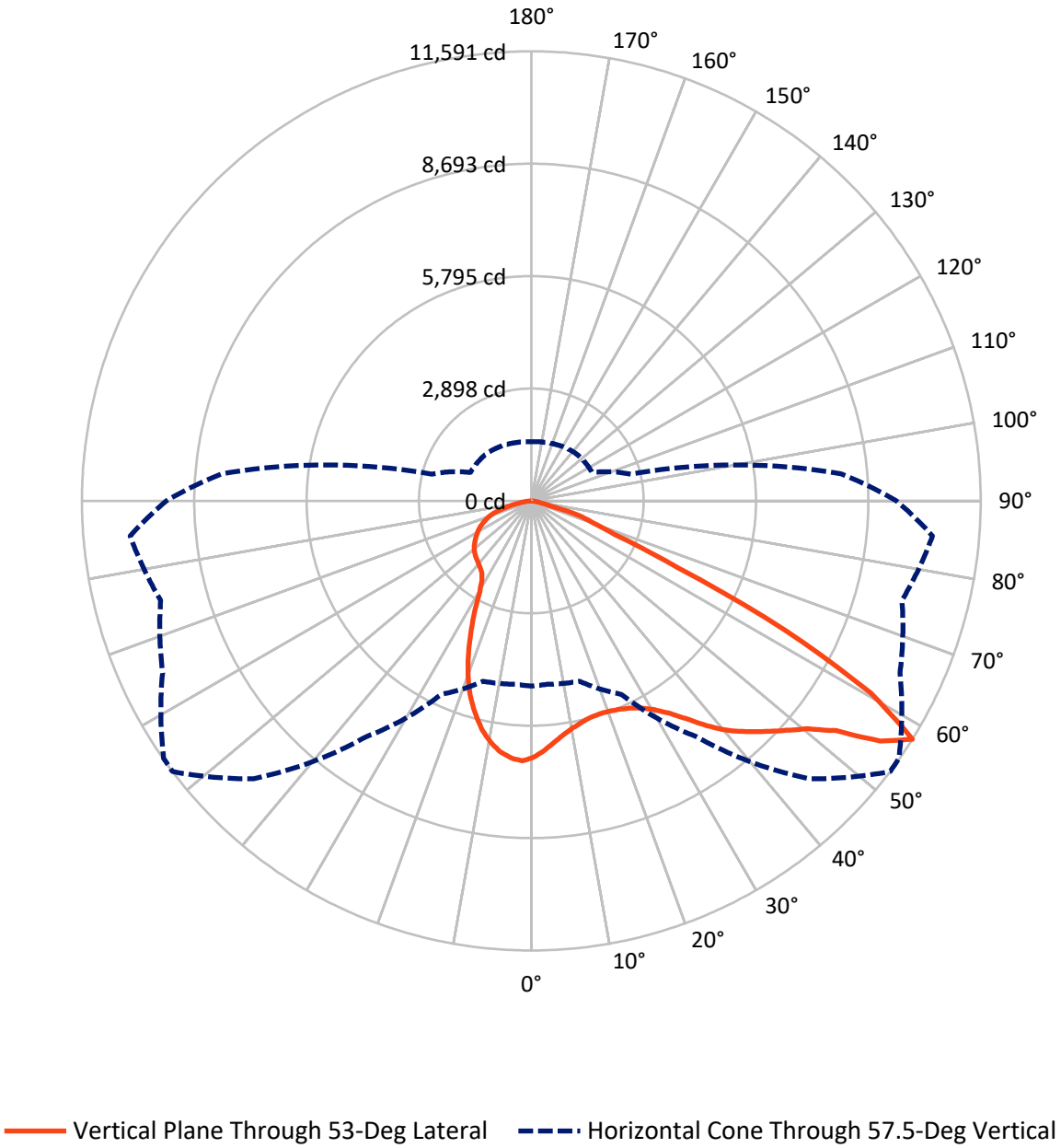
Luminous Intensity Polar Plot



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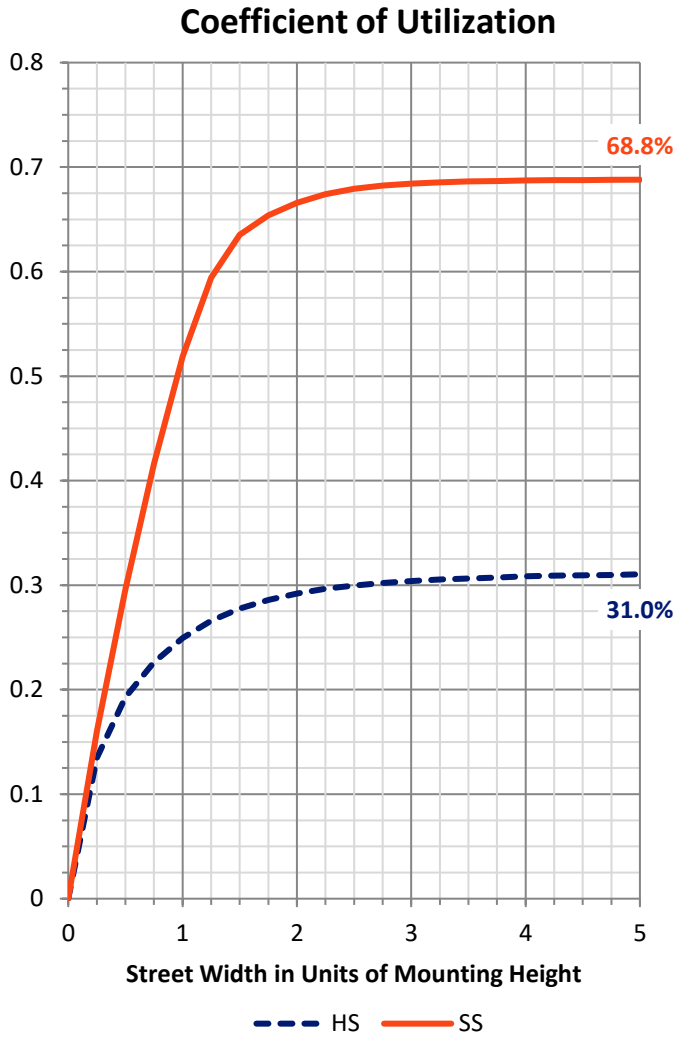
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6473.8	0.0	6473.8
	% Fixture	31.3	0.0	31.3
Street Side	Lumens	14231.6	0.0	14231.6
	% Fixture	68.7	0.0	68.7
Total	Lumens	20705.5	0.0	20705.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	597.9	2.9
10°-20°	1568.6	7.6
20°-30°	2311.2	11.2
30°-40°	3235.0	15.6
40°-50°	4252.7	20.5
50°-60°	4986.2	24.1
60°-70°	2937.4	14.2
70°-80°	730.7	3.5
80°-90°	85.7	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°	20705.5	100.0
0°-180°	20705.5	100.0



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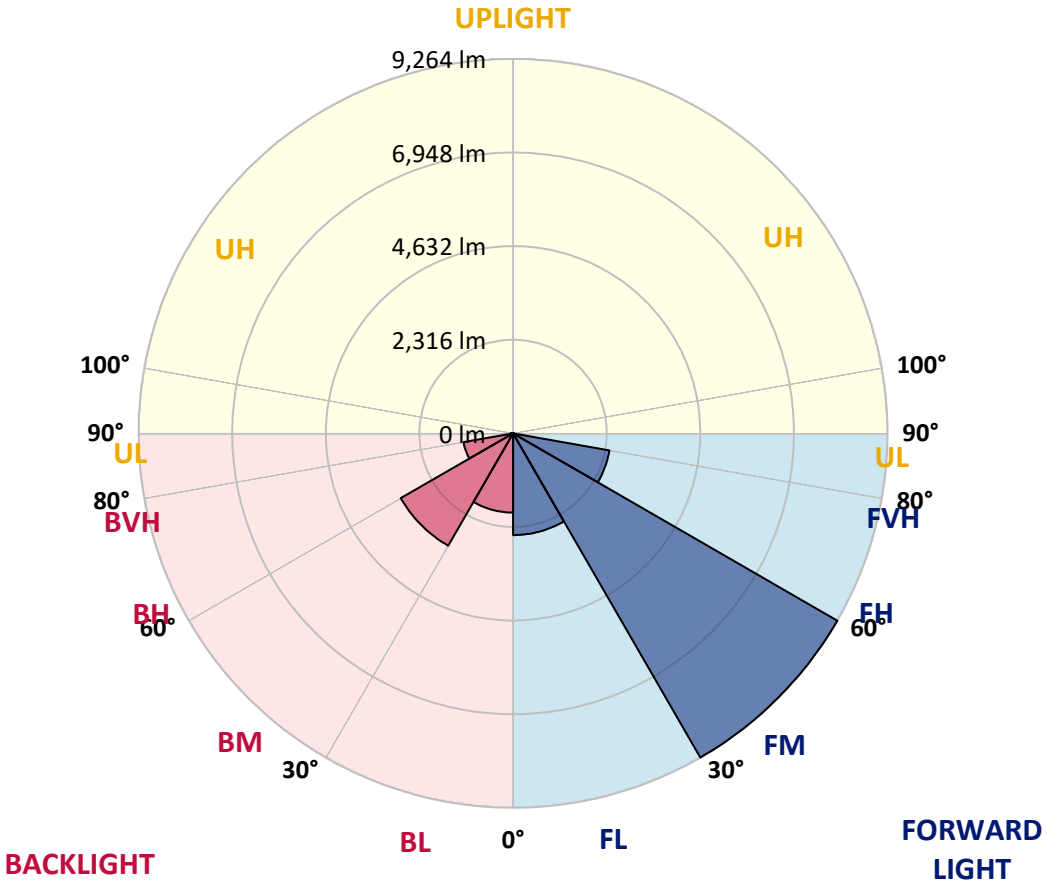
REPORT NUMBER: P638470
CATALOG NUMBER: GWS-SA4E-830-U-SL2-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2517.4	12.2			
FM	(30°-60°)	9263.8	44.7			
FH	(60°-80°)	2421.7	11.7			G2/5000
FVH	(80°-90°)	28.7	0.1			G1/100
BL	(0°-30°)	1960.3	9.5	B3/2500		
BM	(30°-60°)	3210.1	15.5	B3/5000		
BH	(60°-80°)	1246.4	6.0	B3/2500		G3/2500
BVH	(80°-90°)	57.0	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: P638470
CATALOG NUMBER: GWS-SA4E-830-U-SL2-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	*6611.8*	6611.8	6611.8	6611.8	6611.8
2.5°	6231.9	6249.3	6252.8	6306.9	6310.3	6388.8	*6441.0*	6430.6	6484.6	6550.8	6603.1
5°	5933.9	5935.7	5953.1	6017.6	6052.4	6155.2	*6242.4*	6242.4	6346.9	6482.9	6599.6
7.5°	5688.2	5686.4	5702.1	5773.6	5831.1	5954.8	*6073.3*	6087.3	6233.7	6432.3	6622.3
10°	5459.9	5472.1	5489.5	5576.7	5649.9	5803.2	*5944.4*	5967.0	6151.8	6397.5	6653.7
12.5°	5313.5	5315.3	5341.4	5439.0	5533.1	5696.9	*5845.0*	5872.9	6085.5	6364.4	6676.3
15°	5219.4	5221.1	5249.0	5357.1	5466.9	5632.4	*5784.0*	5815.4	6047.2	6359.1	6719.9
17.5°	5177.6	5175.8	5202.0	5310.0	5430.3	5602.8	*5764.9*	5803.2	6064.6	6399.2	6796.6
20°	5177.6	5179.3	5193.3	5290.9	5412.8	5595.8	*5784.0*	5831.1	6132.6	6489.8	6915.1
22.5°	5250.8	5257.7	5264.7	5330.9	5426.8	5606.3	*5834.6*	5897.3	6279.0	6641.5	7070.2
25°	5393.7	5395.4	5402.4	5456.4	5500.0	5635.9	*5918.2*	6012.3	6507.3	6862.8	7265.3
27.5°	5585.4	5609.8	5616.7	5651.6	5651.6	5709.1	*6048.9*	6184.9	6815.7	7181.7	7514.5
30°	5853.7	5862.5	5874.7	5913.0	5871.2	5846.8	*6240.6*	6414.9	7173.0	7566.8	7814.3
32.5°	6089.0	6108.2	6174.4	6237.1	6162.2	6085.5	*6522.9*	6728.6	7516.3	7967.7	8133.2
35°	6289.4	6336.5	6463.7	6603.1	6550.8	6474.2	*6897.6*	7112.0	7798.6	8255.2	8415.5
37.5°	6531.7	6568.3	6742.5	6969.1	7016.1	6979.5	*7354.2*	7507.6	7986.8	8328.4	8568.9
40°	6777.4	6833.1	7058.0	7371.6	7551.1	7577.3	*7776.0*	7878.8	8051.3	8185.5	8539.3
42.5°	7028.3	7124.2	7432.6	7798.6	8117.5	8176.8	*8131.5*	8175.0	8030.4	7988.6	8401.6
45°	7335.0	7448.3	7796.9	8263.9	8683.9	8776.3	*8480.0*	8439.9	8026.9	7913.6	8316.2
47.5°	7697.5	7810.8	8143.7	8687.4	9224.1	9292.1	*8837.3*	8764.1	8148.9	8028.6	8431.2
50°	8018.2	8096.6	8394.6	9002.8	9727.8	9767.9	*9231.1*	9142.2	8452.1	8347.6	8790.2
52.5°	7692.3	7683.6	7997.3	8746.6	9989.2	10471.9	*9837.6*	9752.2	9037.7	8877.3	9346.1
55°	6526.4	6427.1	6707.7	7444.8	9259.0	11097.6	*10925.0*	10754.2	9818.4	9410.6	9867.2
57.5°	*4771.5*	*4743.6*	*4811.6*	*5503.5*	*7417.0*	*10128.6*	*11590.7*	*11575.1*	*10492.8*	*9898.6*	*10386.5*
60°	3731.1	3689.3	3508.1	3527.2	5055.6	7911.9	*10058.9*	10520.7	10911.1	10191.3	10749.0
62.5°	3312.9	3281.5	3187.4	2927.7	3011.4	5304.8	*7373.4*	7796.9	9534.3	9001.1	9232.9
65°	2743.0	2734.3	2812.7	2802.3	2523.4	2929.5	*4161.6*	4588.5	5994.9	6069.8	5994.9
67.5°	1993.7	1978.0	2176.6	2568.7	2429.3	2211.5	*2319.5*	2467.7	3074.1	2760.4	2485.1
70°	1296.6	1273.9	1388.9	1856.0	2174.9	1927.4	*1671.3*	1646.9	1690.4	1050.9	1136.2
72.5°	869.6	843.5	841.7	1021.2	1314.0	1298.3	*1294.8*	1282.6	1145.0	829.5	920.1
75°	484.5	463.6	458.3	440.9	470.5	479.2	*510.6*	528.0	571.6	629.1	697.1
77.5°	81.9	80.2	101.1	129.0	177.8	228.3	*282.3*	298.0	367.7	435.7	479.2
80°	45.3	47.1	61.0	74.9	99.3	135.9	*174.3*	184.7	226.6	263.1	298.0
82.5°	24.4	24.4	31.4	40.1	54.0	71.5	*94.1*	102.8	130.7	153.4	177.8
85°	8.7	8.7	12.2	15.7	22.7	29.6	*36.6*	41.8	57.5	78.4	88.9
87.5°	0.0	0.0	0.0	0.0	1.7	3.5	*7.0*	7.0	8.7	15.7	22.7
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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Scaled Data Report

REPORT NUMBER: P638470
CATALOG NUMBER: GWS-SA4E-830-U-SL2-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8
2.5°	6646.7	6599.6	6664.1	6693.7	6704.2	6711.2	6665.8	6634.5	6624.0	6590.9	6571.7
5°	6671.1	6639.7	6700.7	6700.7	6657.1	6611.8	6519.5	6455.0	6409.7	6355.6	6346.9
7.5°	6712.9	6690.2	6723.4	6655.4	6545.6	6423.6	6263.3	6137.8	6036.7	5970.5	5972.3
10°	6768.7	6740.8	6714.6	6563.0	6362.6	6137.8	5892.1	5709.1	5541.8	5465.1	5423.3
12.5°	6805.3	6765.2	6655.4	6404.4	6109.9	5808.4	5461.6	5189.8	4947.5	4837.8	4829.0
15°	6850.6	6777.4	6557.8	6198.8	5789.3	5378.0	4931.9	4553.7	4226.1	4055.3	4046.6
17.5°	6909.8	6789.6	6441.0	5963.5	5451.2	4844.7	4283.6	3807.8	3459.3	3326.8	3349.5
20°	6993.5	6803.5	6308.6	5702.1	5031.2	4238.3	3539.4	3102.0	2967.8	2959.1	2941.7
22.5°	7087.6	6812.2	6162.2	5409.4	4522.3	3591.7	2924.3	2737.8	2736.0	2779.6	2790.1
25°	7193.9	6819.2	5996.7	5067.8	3971.6	2946.9	2586.2	2530.4	2574.0	2655.9	2666.3
27.5°	7329.8	6833.1	5796.2	4693.1	3386.1	2546.1	2399.7	2385.8	2438.0	2514.7	2511.2
30°	7530.2	6883.7	5583.6	4262.7	2784.8	2356.1	2286.4	2288.2	2309.1	2345.7	2350.9
32.5°	7734.1	6962.1	5376.2	3778.2	2439.8	2248.1	2216.7	2213.2	2213.2	2228.9	2232.4
35°	7927.6	7051.0	5151.4	3272.8	2272.5	2185.4	2164.4	2154.0	2148.8	2145.3	2140.0
37.5°	8035.6	7094.6	4931.9	2774.4	2183.6	2143.5	2122.6	2108.7	2089.5	2075.6	2072.1
40°	7988.6	7044.0	4677.4	2401.4	2129.6	2103.4	2079.0	2059.9	2033.7	2021.5	2014.6
42.5°	7831.7	6887.2	4400.3	2225.4	2086.0	2059.9	2030.3	1998.9	1981.5	1971.0	1969.3
45°	7666.2	6697.2	4065.7	2122.6	2044.2	2012.8	1978.0	1943.1	1923.9	1918.7	1917.0
47.5°	7660.9	6603.1	3710.2	2040.7	1993.7	1962.3	1918.7	1883.9	1863.0	1856.0	1849.0
50°	7891.0	6699.0	3309.4	1969.3	1941.4	1908.3	1859.5	1821.1	1795.0	1786.3	1784.5
52.5°	8368.5	7059.7	2950.4	1897.8	1871.7	1833.3	1793.2	1754.9	1723.5	1707.9	1706.1
55°	8884.3	7518.0	2727.3	1824.6	1789.8	1756.6	1720.1	1678.2	1643.4	1619.0	1615.5
57.5°	*9417.6*	*8018.2*	*2659.4*	*1732.2*	*1706.1*	*1683.5*	*1639.9*	*1594.6*	*1554.5*	*1531.8*	*1526.6*
60°	9856.7	8448.6	2786.6	1634.7	1620.7	1591.1	1551.0	1507.4	1479.6	1462.1	1458.6
62.5°	8251.7	6878.5	2249.8	1528.4	1528.4	1497.0	1451.7	1420.3	1401.1	1388.9	1385.5
65°	5236.8	4259.2	1535.3	1422.0	1420.3	1378.5	1340.1	1319.2	1310.5	1291.3	1287.9
67.5°	2281.2	1946.6	1312.3	1314.0	1307.0	1261.7	1223.4	1207.7	1190.3	1169.4	1167.6
70°	1183.3	1206.0	1174.6	1193.8	1181.6	1127.5	1090.9	1066.5	1029.9	1009.0	1010.8
72.5°	955.0	979.4	1014.3	1043.9	1017.7	974.2	916.7	887.0	840.0	817.3	819.1
75°	728.5	754.6	787.7	819.1	798.2	744.1	707.5	677.9	623.9	597.7	603.0
77.5°	501.9	515.8	555.9	554.2	547.2	531.5	477.5	442.6	386.9	355.5	359.0
80°	311.9	320.7	339.8	348.5	345.1	324.1	280.6	254.4	221.3	202.2	203.9
82.5°	188.2	193.4	210.9	212.6	210.9	195.2	162.1	142.9	122.0	111.5	111.5
85°	95.8	99.3	109.8	109.8	99.3	83.6	74.9	66.2	54.0	48.8	48.8
87.5°	26.1	26.1	33.1	27.9	22.7	20.9	10.5	8.7	3.5	1.7	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

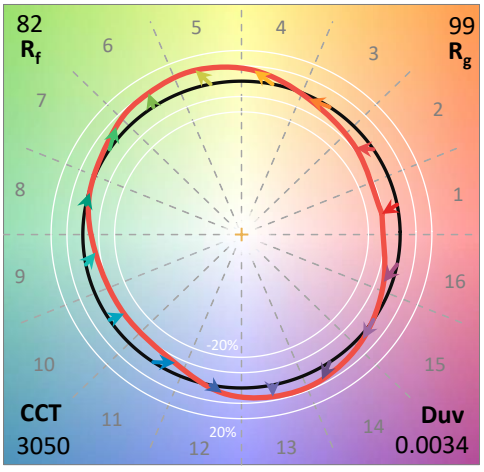
Test Information

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

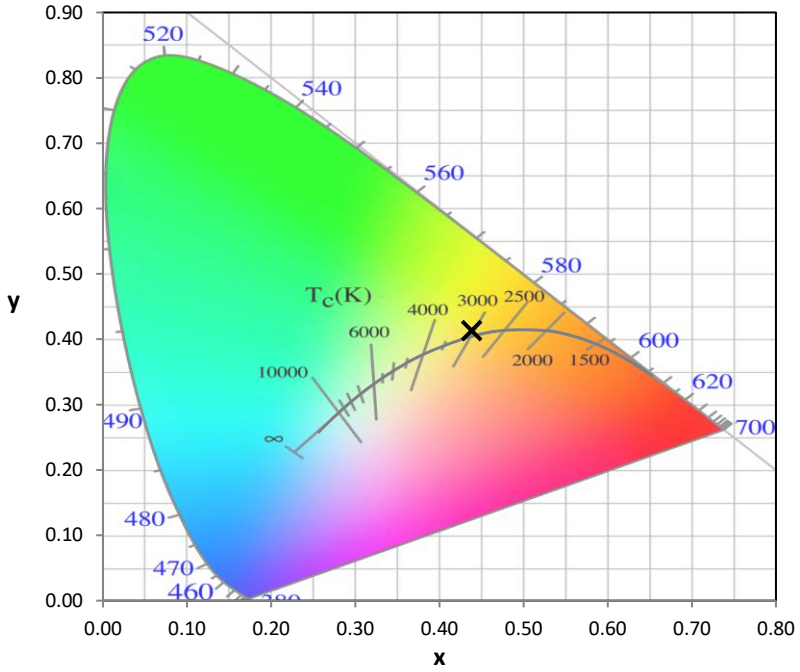
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

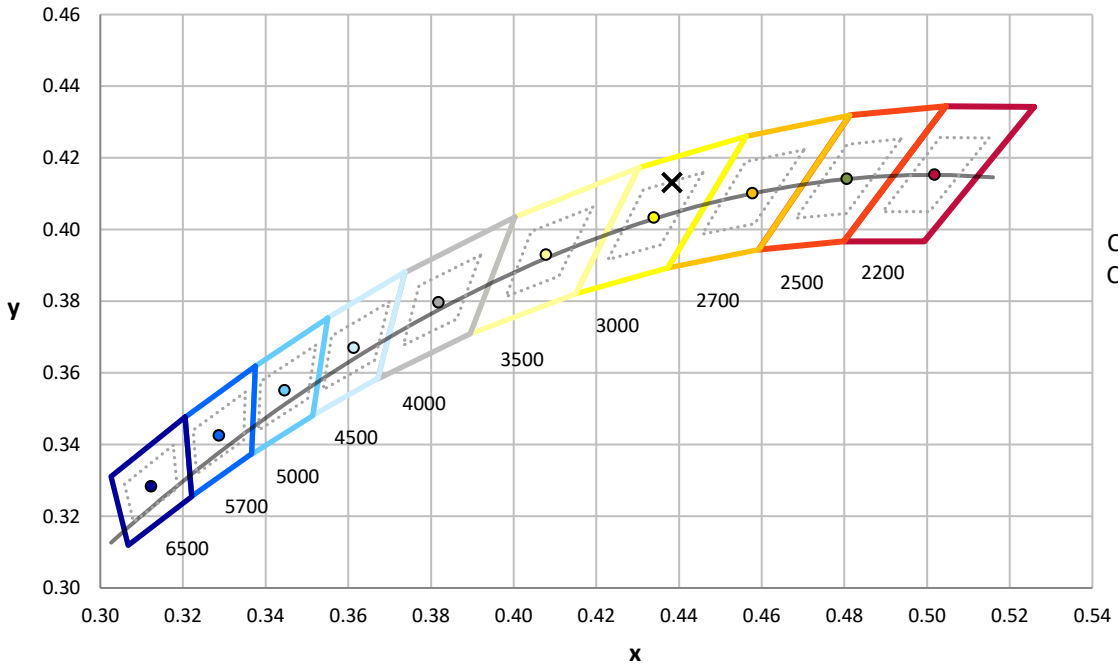
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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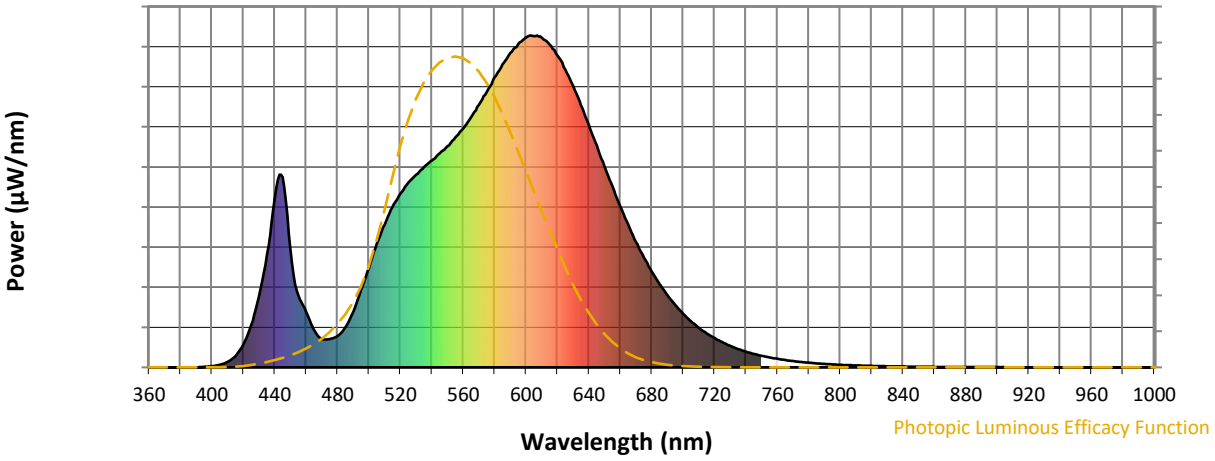
Photopic Flux vs. Wavelength



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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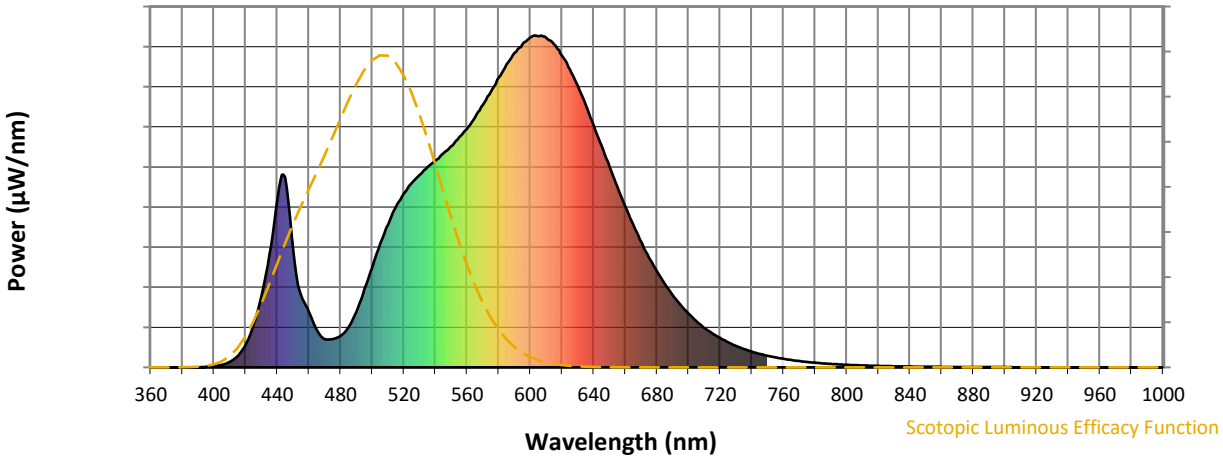
Scotopic Flux vs. Wavelength



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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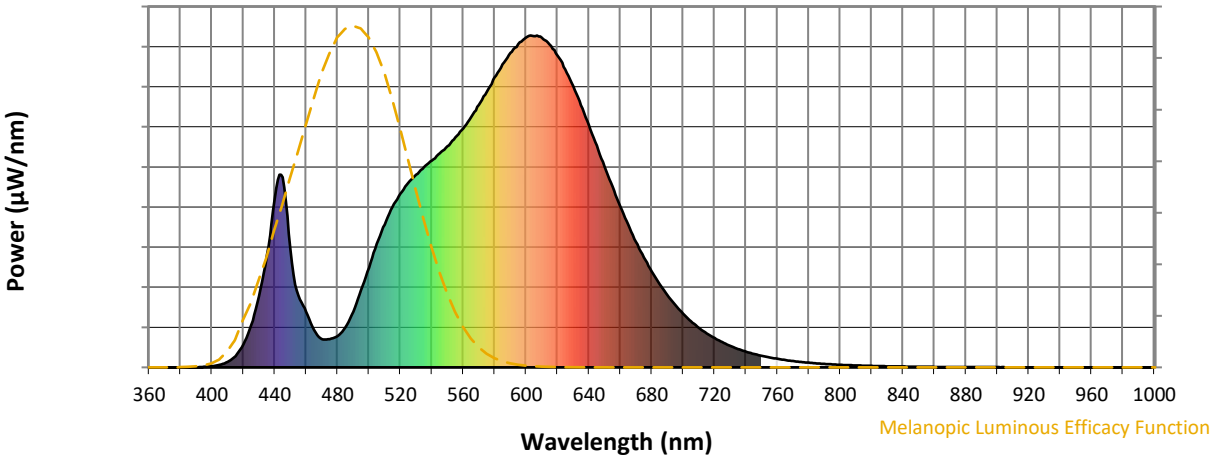
Melanopic Flux vs. Wavelength



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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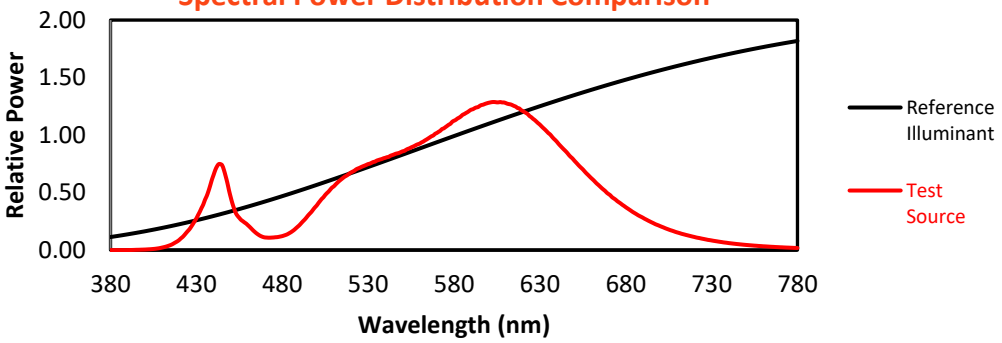
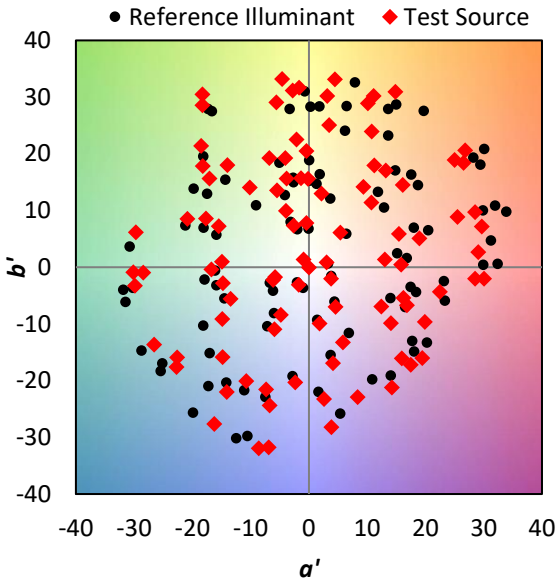
Summary

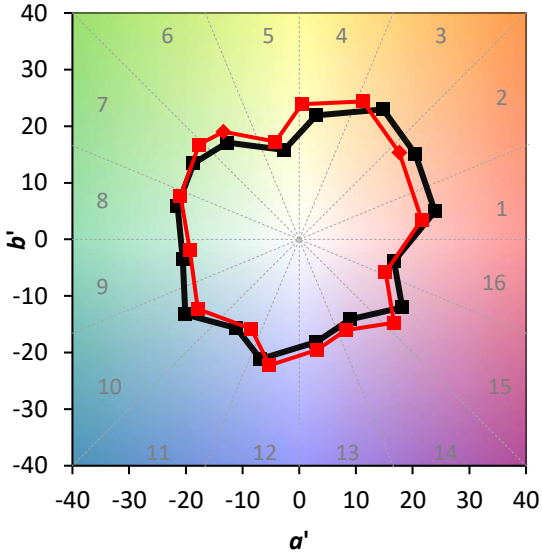
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

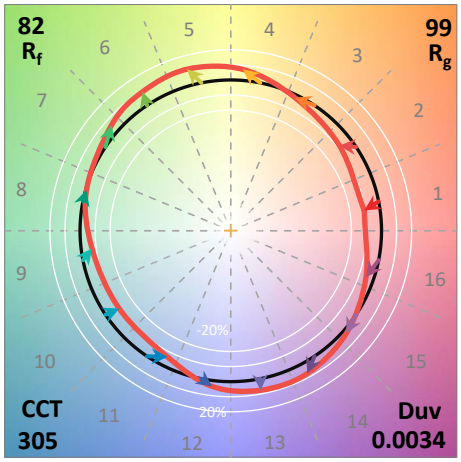
Spectral Power Distribution Comparison

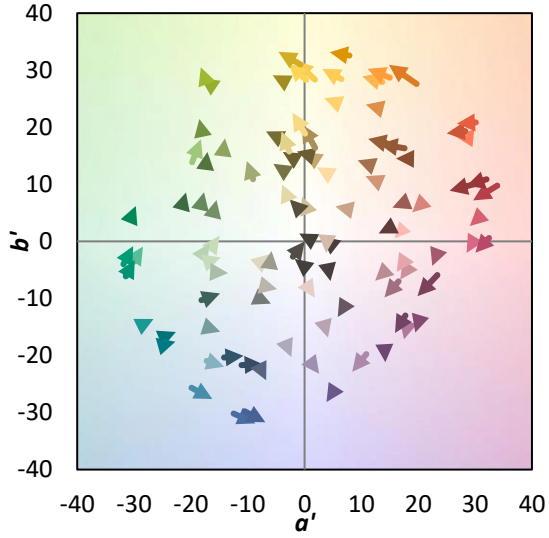


Color Vector Graphics









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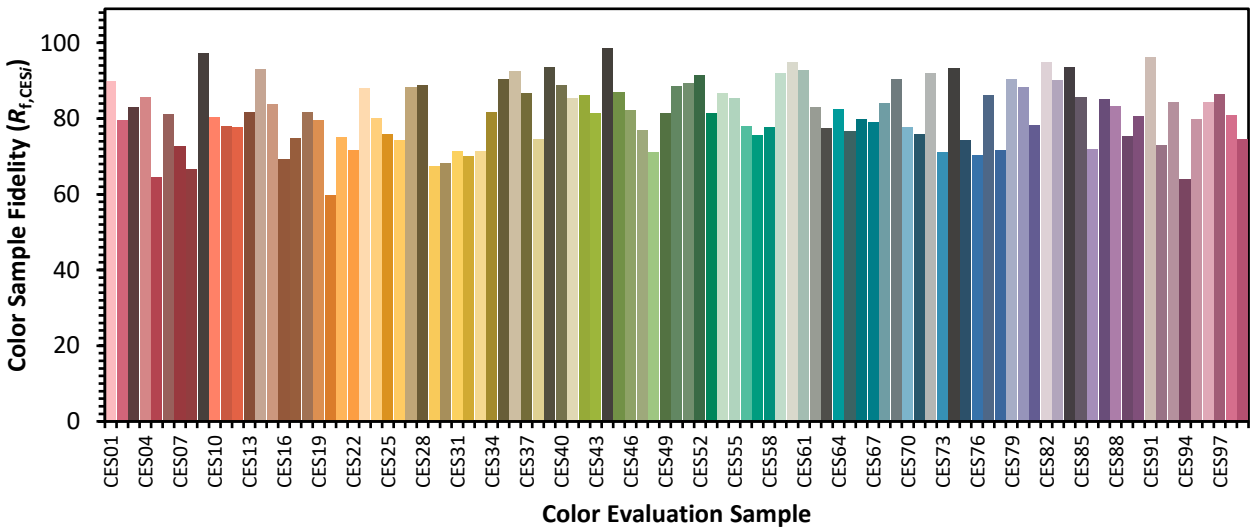
Individual Sample Fidelity Index ($R_{f,i}$)

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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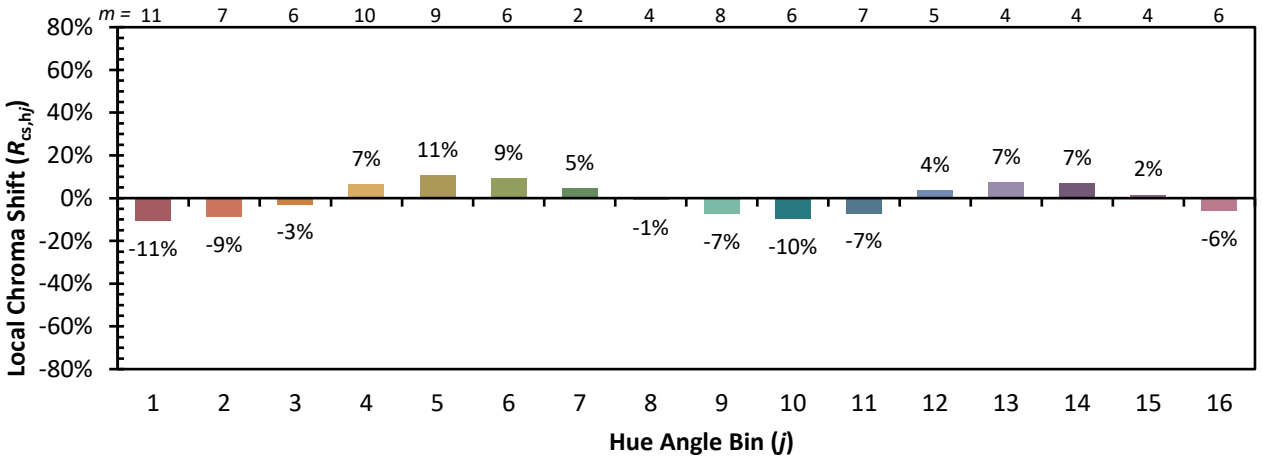
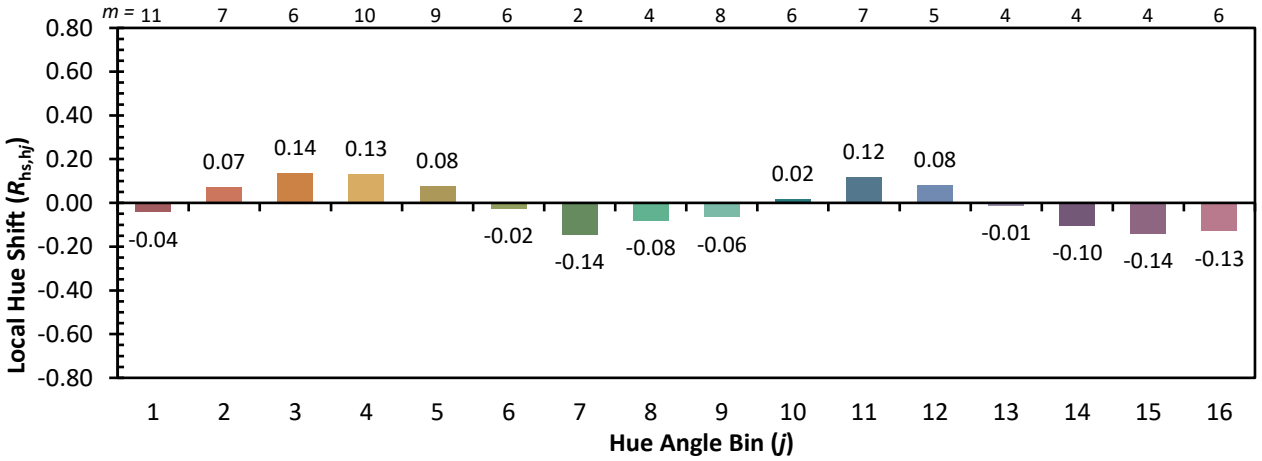
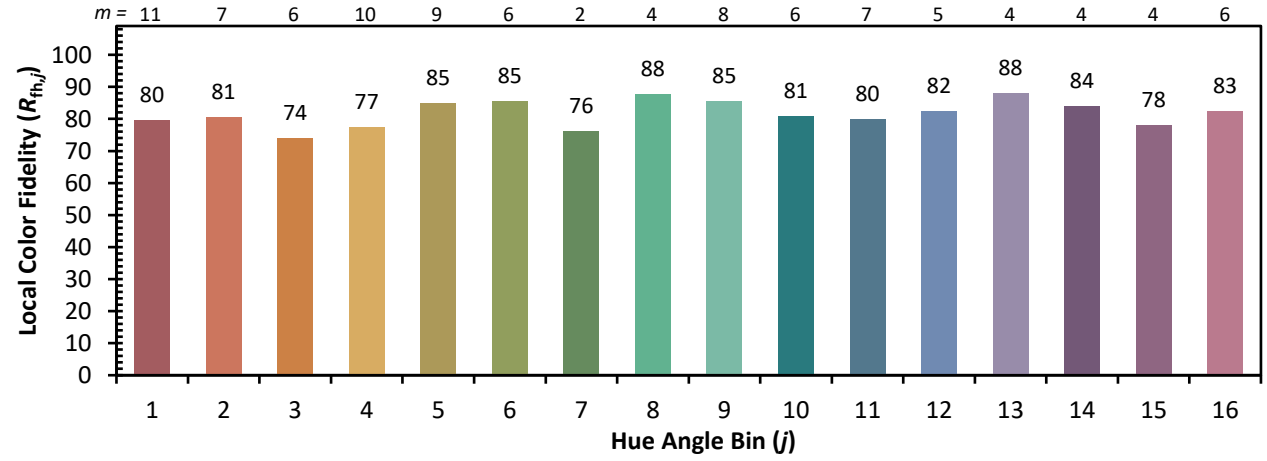
Color Rendition by Hue-Angle Bin







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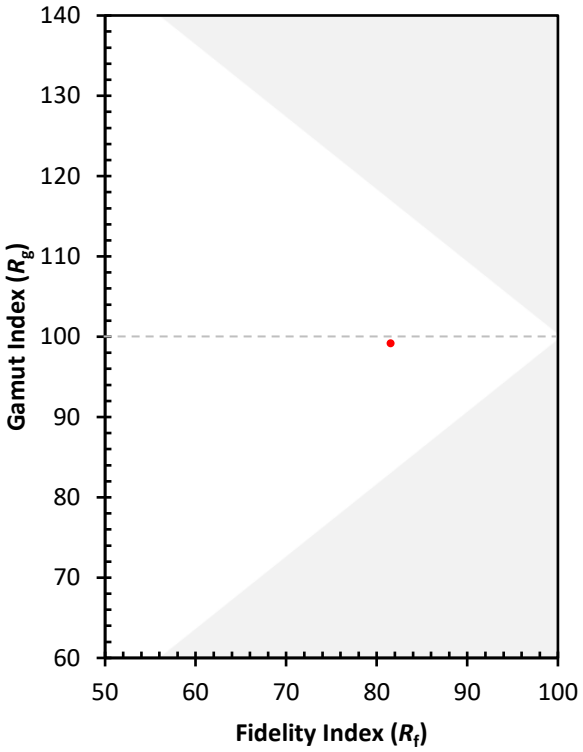
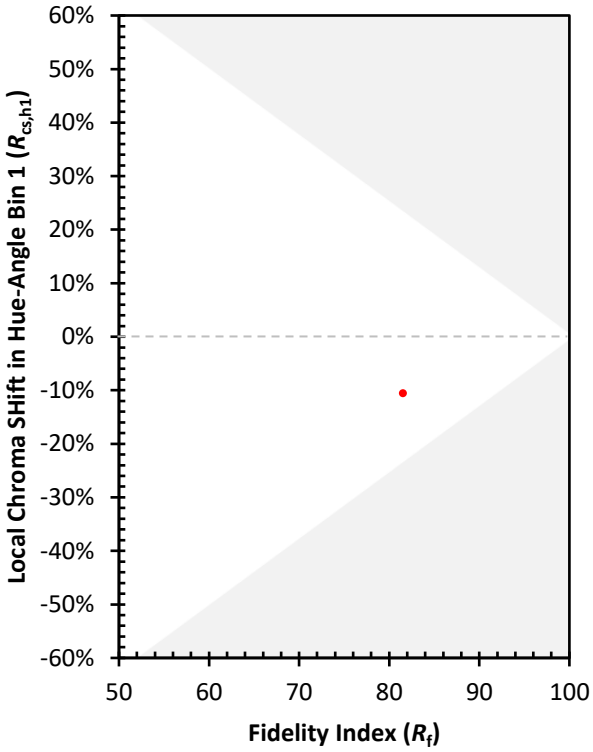
Measure Comparisons





(END OF REPORT)