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: P641473

Luminaire Tested: GWS-SA5F-830-U-T3R-W

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:	P641473
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-15)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5F-830-U-T3R-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	33706.7 lumens
Efficiency:	N/A
Efficacy:	108.6 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B3 - U0 - G4

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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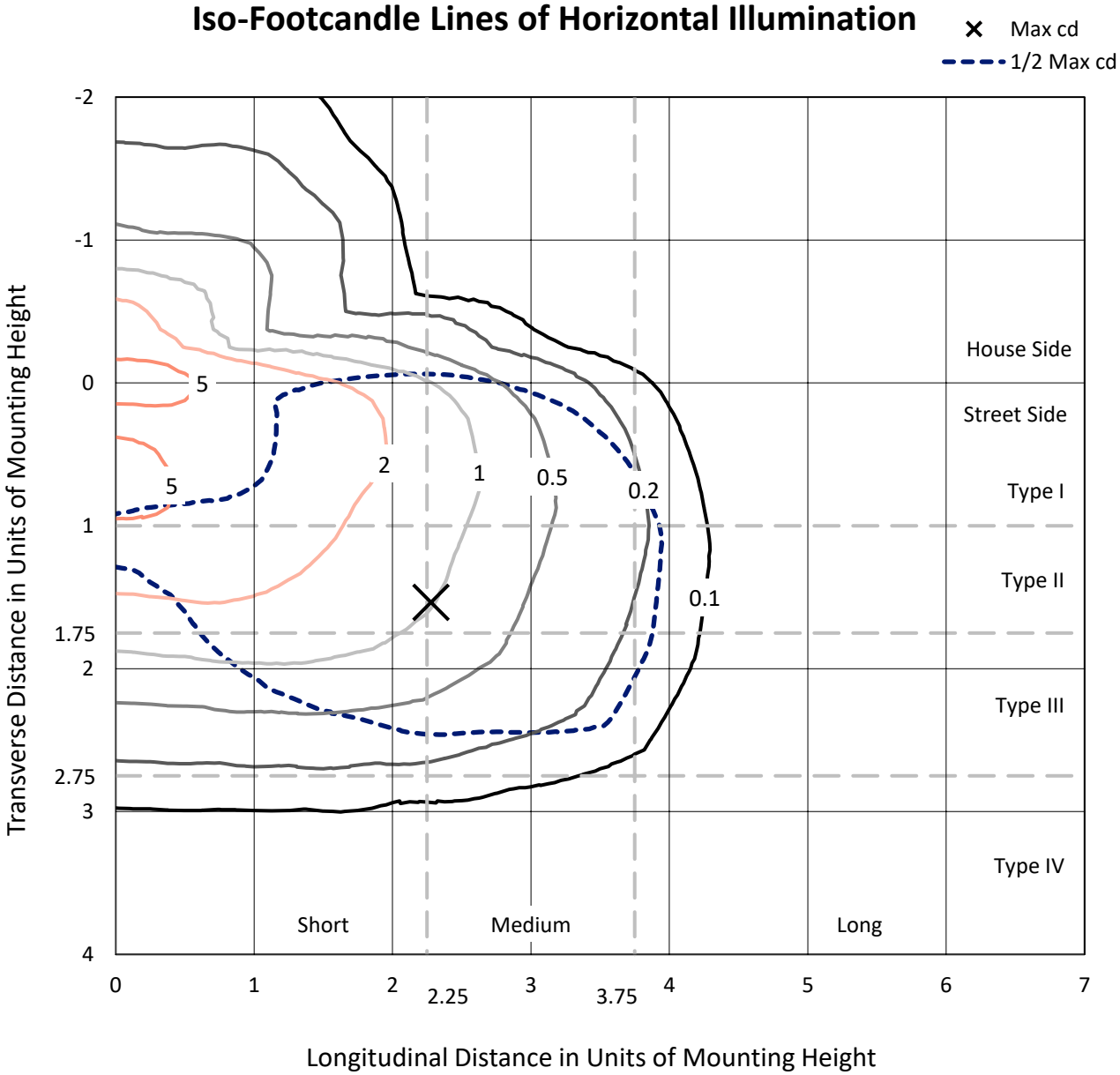
REPORT NUMBER: P641473
CATALOG NUMBER: GWS-SA5F-830-U-T3R-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 30 foot mounting height. Maximum calculated value = 6.3 fc
Type III - Medium - N/A

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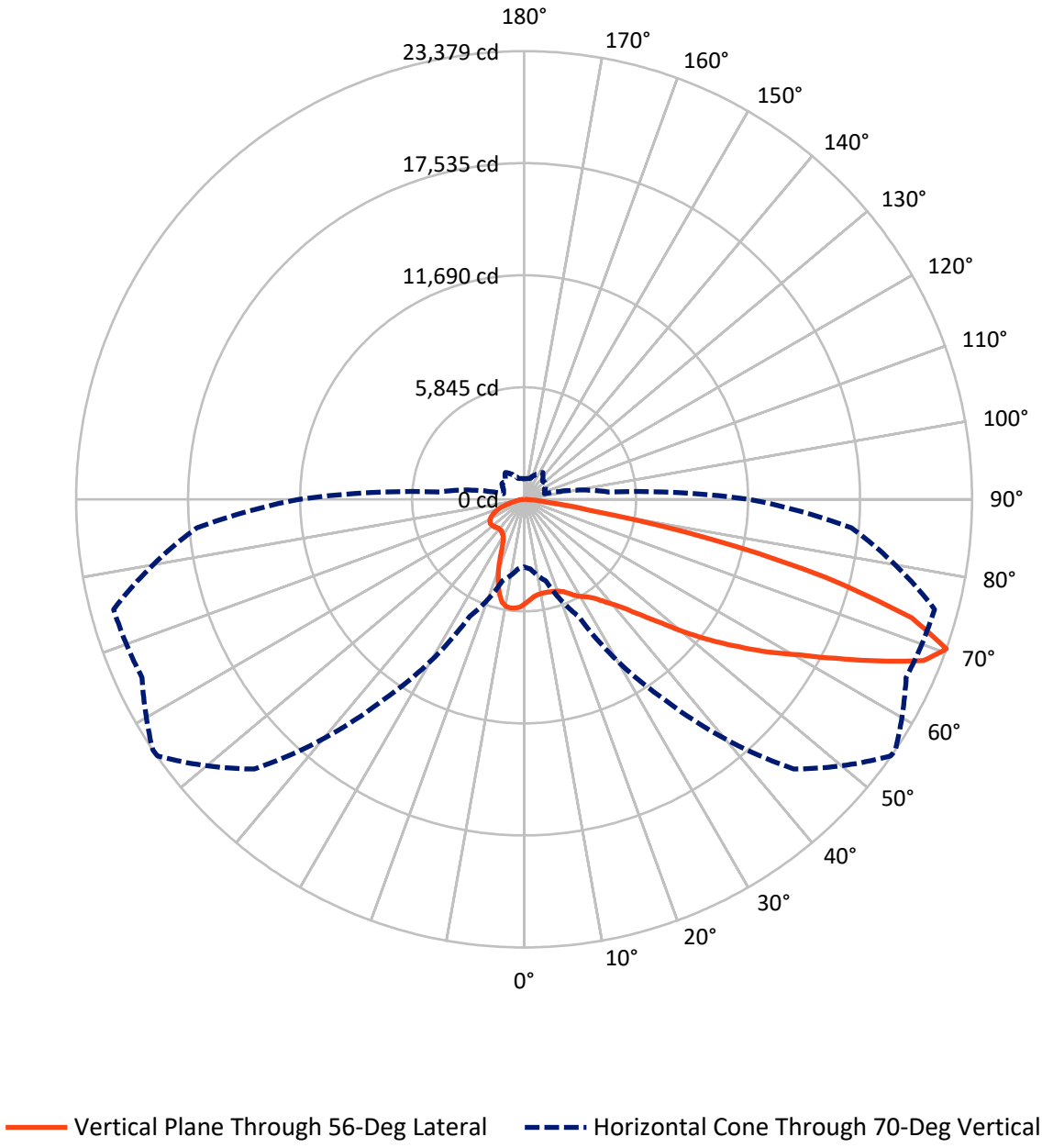
Luminous Intensity Polar Plot



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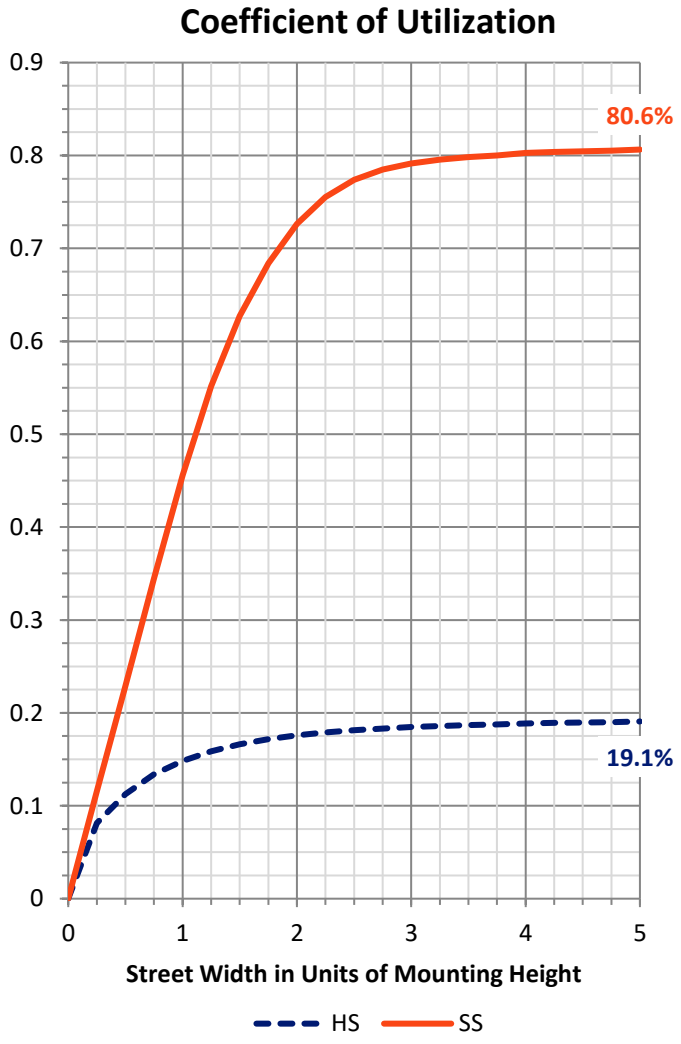
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6480.2	0.0	6480.2
	% Fixture	19.2	0.0	19.2
Street Side	Lumens	27226.5	0.0	27226.5
	% Fixture	80.8	0.0	80.8
Total	Lumens	33706.7	0.0	33706.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	503.5	1.5
10°-20°	1364.2	4.0
20°-30°	2255.4	6.7
30°-40°	3372.1	10.0
40°-50°	5018.2	14.9
50°-60°	7134.4	21.2
60°-70°	8836.2	26.2
70°-80°	4879.1	14.5
80°-90°	343.6	1.0
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°	33706.7	100.0
0°-180°	33706.7	100.0



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REPORT NUMBER: P641473
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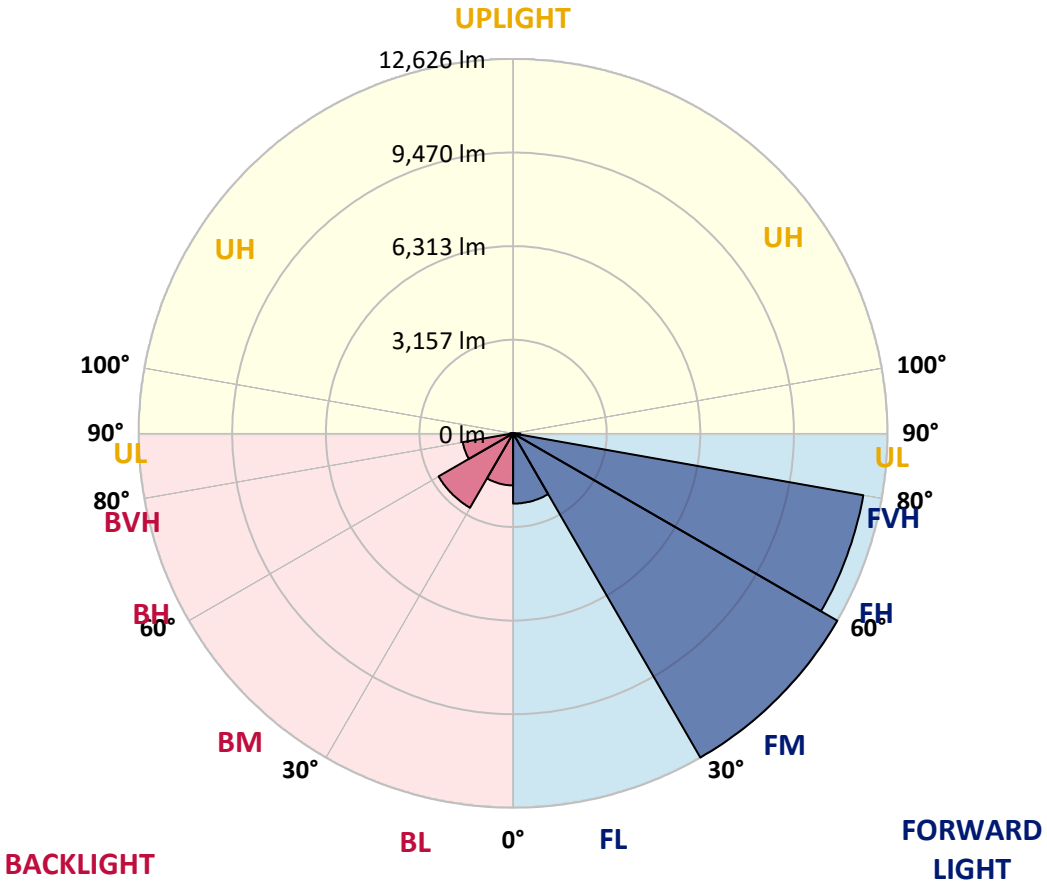
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2368.9	7.0			
FM	(30°-60°)	12626.0	37.5			
FH	(60°-80°)	11992.9	35.6			G4/12000
FVH	(80°-90°)	238.8	0.7			G3/500
BL	(0°-30°)	1754.2	5.2	B3/2500		
BM	(30°-60°)	2898.7	8.6	B3/5000		
BH	(60°-80°)	1722.4	5.1	B3/2500		G3/2500
BVH	(80°-90°)	104.8	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
Type III Medium



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REPORT NUMBER: P641473
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	5440.8	5440.8	5440.8	5440.8	5440.8	5440.8	5440.8	*5440.8*	5440.8	5440.8	5440.8
2.5°	5091.4	5062.8	5096.1	5112.8	5155.5	5217.3	5272.0	*5274.4*	5302.9	5371.8	5438.4
5°	4860.8	4846.5	4856.1	4906.0	4951.1	5029.6	5112.8	*5119.9*	5200.7	5336.2	5469.3
7.5°	4682.5	4663.5	4699.2	4763.4	4820.4	4908.3	5017.7	*5027.2*	5141.3	5345.7	5550.1
10°	4425.8	4411.6	4478.1	4563.7	4687.3	4832.3	4977.3	*4989.2*	5138.9	5407.5	5692.7
12.5°	4314.1	4314.1	4342.6	4423.5	4558.9	4751.5	4970.1	*4989.2*	5176.9	5502.6	5875.8
15°	4487.6	4499.5	4475.7	4471.0	4525.7	4708.7	4979.7	*5008.2*	5248.2	5600.0	6056.4
17.5°	4837.0	4848.9	4787.1	4689.7	4635.0	4749.1	5015.3	*5046.2*	5324.3	5707.0	6251.3
20°	5326.7	5340.9	5205.5	5055.7	4867.9	4865.6	5084.2	*5112.8*	5421.8	5823.5	6458.1
22.5°	5899.5	5909.0	5737.9	5500.2	5212.6	5081.9	5203.1	*5231.6*	5547.7	5985.1	6681.5
25°	6562.7	6591.2	6384.4	6039.8	5649.9	5379.0	5400.4	*5433.6*	5773.5	6201.4	6945.4
27.5°	7271.0	7306.7	7069.0	6688.7	6151.5	5707.0	5654.7	*5683.2*	6013.6	6334.5	7085.6
30°	7996.0	8022.1	7784.4	7349.5	6691.0	6077.8	5868.6	*5885.3*	6118.2	6398.7	7228.2
32.5°	8801.8	8780.4	8552.2	8050.6	7313.8	6522.3	6068.3	*6063.5*	6234.7	6527.0	7432.6
35°	9557.6	9588.5	9346.1	8792.2	7998.4	7071.3	6367.8	*6348.8*	6481.9	6736.2	7720.3
37.5°	10472.7	10463.2	10173.2	9574.3	8685.3	7596.7	6788.5	*6755.2*	6802.8	7061.8	8122.0
40°	11126.4	11192.9	11005.2	10446.6	9488.7	8243.2	7280.5	*7206.8*	7218.7	7463.5	8659.1
42.5°	11661.2	11723.0	11742.0	11385.5	10408.6	9041.8	7893.8	*7820.1*	7827.2	8174.2	9319.9
45°	12072.4	12155.6	12424.2	12319.6	11444.9	9964.1	8723.3	*8647.3*	8652.0	9037.1	10118.6
47.5°	12241.2	12331.5	12875.8	13125.4	12545.4	11067.0	9754.9	*9643.2*	9659.8	10085.3	11031.3
50°	12186.5	12307.7	13044.6	13745.8	13467.7	12188.9	10988.5	*10910.1*	10845.9	11463.9	12022.5
52.5°	11715.9	11849.0	13027.9	14140.3	14221.1	13249.0	12262.6	*12217.4*	12203.1	12928.1	13130.1
55°	10330.1	10553.5	12455.1	14244.9	14810.6	14247.3	13643.5	*13567.5*	13641.2	14496.9	14249.7
57.5°	9562.4	9728.8	11333.2	14128.4	15293.1	15198.1	15022.2	*15029.3*	15112.5	16201.1	15606.9
60°	9125.0	9319.9	10710.4	13809.9	15756.6	16353.2	16465.0	*16465.0*	16614.7	18038.5	16985.5
62.5°	8545.0	8742.3	10128.1	13196.7	16184.5	17712.8	18278.5	*18271.4*	18330.8	20008.9	18333.2
65°	7368.5	7551.5	8958.6	12229.3	16393.6	19210.3	20339.3	*20317.9*	20199.1	21763.1	19224.6
67.5°	5350.5	5524.0	6862.2	10389.5	15640.2	20417.8	22461.9	*22471.4*	21760.7	22868.4	19272.1
70°	*3527.4*	*3646.2*	*4411.6*	*6748.1*	*12718.9*	*19897.2*	*23350.9*	*23379.4*	*22000.8*	*22179.1*	*17151.9*
72.5°	2201.0	2284.2	2754.9	4024.1	7515.8	15749.5	21069.1	*21147.5*	19792.6	19490.8	14092.8
75°	1461.8	1518.9	1832.6	2346.0	3477.4	8523.7	16015.7	*16267.7*	15863.6	15278.9	9819.1
77.5°	879.5	927.0	1167.1	1490.3	1540.2	3330.1	9348.4	*9999.7*	10056.8	7977.0	4112.1
80°	401.7	456.4	644.1	850.9	820.0	1159.9	3296.8	*3448.9*	4069.3	2533.8	1297.8
82.5°	237.7	261.5	427.8	423.1	349.4	563.3	1186.1	*1217.0*	1034.0	927.0	553.8
85°	95.1	111.7	180.6	159.3	128.4	183.0	446.9	*468.3*	449.2	404.1	204.4
87.5°	0.0	0.0	0.0	0.0	2.4	4.8	40.4	*42.8*	61.8	111.7	61.8
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: P641473
CATALOG NUMBER: GWS-SA5F-830-U-T3R-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5440.8	5440.8	5440.8	5440.8	5440.8	5440.8	5440.8	5440.8	5440.8	5440.8	5440.8
2.5°	5481.2	5466.9	5538.2	5592.9	5616.7	5640.4	5619.0	5611.9	5611.9	5564.4	5540.6
5°	5540.6	5547.7	5645.2	5690.4	5690.4	5671.3	5614.3	5573.9	5559.6	5497.8	5481.2
7.5°	5652.3	5683.2	5773.5	5771.2	5704.6	5600.0	5457.4	5348.1	5248.2	5205.5	5179.3
10°	5835.3	5875.8	5937.6	5837.7	5652.3	5376.6	5074.7	4837.0	4694.4	4580.3	4580.3
12.5°	6044.5	6082.5	6070.7	5840.1	5457.4	4941.6	4506.6	4233.3	4033.6	3929.1	3929.1
15°	6253.7	6284.6	6156.2	5730.8	5051.0	4364.0	3888.6	3560.6	3387.1	3289.7	3289.7
17.5°	6465.2	6462.9	6191.9	5478.8	4520.9	3724.6	3258.8	3004.4	2945.0	2928.4	2926.0
20°	6669.6	6615.0	6146.7	5058.1	3905.3	3080.5	2785.8	2802.4	2890.3	2928.4	2933.1
22.5°	6900.2	6764.7	6013.6	4520.9	3206.5	2633.6	2652.6	2790.5	2918.9	2975.9	2983.0
25°	7135.5	6893.1	5790.2	3891.0	2621.7	2469.6	2617.0	2771.5	2916.5	2990.2	2997.3
27.5°	7230.6	6893.1	5409.9	3161.3	2310.4	2400.7	2562.3	2712.1	2864.2	2949.8	2966.4
30°	7309.0	6833.7	4877.4	2502.9	2182.0	2334.1	2474.4	2612.2	2762.0	2866.6	2885.6
32.5°	7418.4	6781.4	4233.3	2103.6	2122.6	2270.0	2367.4	2483.9	2619.4	2688.3	2681.2
35°	7546.7	6700.5	3456.0	1913.4	2072.7	2215.3	2284.2	2353.2	2291.4	2289.0	2296.1
37.5°	7729.8	6629.2	2778.6	1827.9	2039.4	2177.3	2234.3	2086.9	2001.4	1965.7	1951.5
40°	7993.6	6600.7	2191.5	1777.9	2034.6	2174.9	2134.5	1906.3	1789.8	1666.2	1663.8
42.5°	8326.4	6579.3	1811.2	1754.2	2051.3	2229.6	1996.6	1787.4	1547.4	1492.7	1488.0
45°	8754.2	6546.0	1621.1	1749.4	2091.7	2272.3	1982.4	1623.4	1459.4	1435.7	1435.7
47.5°	9270.0	6493.8	1535.5	1749.4	2136.9	2253.3	1939.6	1587.8	1419.0	1445.2	1461.8
50°	9861.9	6427.2	1490.3	1744.7	2182.0	2253.3	1849.2	1580.7	1409.5	1545.0	1599.7
52.5°	10494.1	6351.1	1459.4	1725.6	2212.9	2255.7	1854.0	1604.4	1419.0	1568.8	1613.9
55°	11192.9	6339.3	1416.6	1685.2	2222.4	2193.9	1865.9	1656.7	1433.3	1421.4	1423.8
57.5°	12074.8	6481.9	1385.7	1625.8	2184.4	2067.9	1889.7	1694.7	1416.6	1419.0	1435.7
60°	12997.0	6750.5	1411.9	1568.8	2106.0	1949.1	1906.3	1675.7	1335.8	1297.8	1302.6
62.5°	13781.4	6954.9	1433.3	1542.6	1991.9	1844.5	1889.7	1632.9	1290.7	1281.2	1302.6
65°	14109.4	6786.1	1381.0	1488.0	1825.5	1716.1	1854.0	1578.3	1252.6	1217.0	1219.4
67.5°	13745.8	5994.6	1278.8	1366.7	1637.7	1552.1	1797.0	1507.0	1200.3	1157.6	1148.1
70°	*11742.0*	*4404.4*	*1102.9*	*1174.2*	*1409.5*	*1359.6*	*1709.0*	*1414.3*	*1117.2*	*1086.3*	*1064.9*
72.5°	9462.5	3118.5	915.1	934.1	1105.3	1145.7	1556.9	1297.8	1022.1	934.1	903.2
75°	6586.5	1958.6	763.0	744.0	798.6	874.7	1214.6	1076.7	881.8	789.1	760.6
77.5°	2833.3	1005.4	596.6	587.1	532.4	606.1	931.8	898.5	739.2	632.3	615.6
80°	948.4	582.3	430.2	413.6	354.2	425.5	656.0	717.8	580.0	468.3	439.7
82.5°	475.4	337.5	273.3	247.2	237.7	268.6	387.4	446.9	401.7	323.3	273.3
85°	232.9	192.5	149.7	147.4	123.6	116.5	161.6	190.2	180.6	133.1	126.0
87.5°	85.6	76.1	47.5	38.0	23.8	16.6	9.5	9.5	7.1	7.1	7.1
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

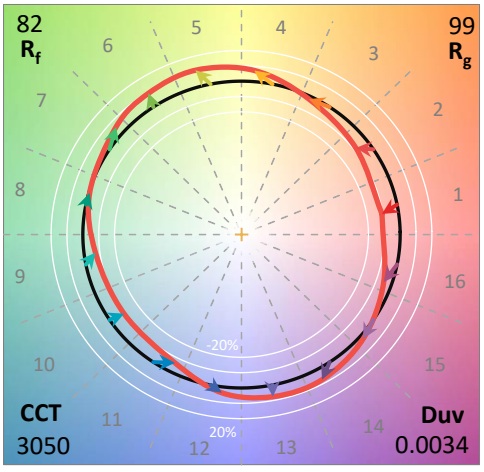
Test Information

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

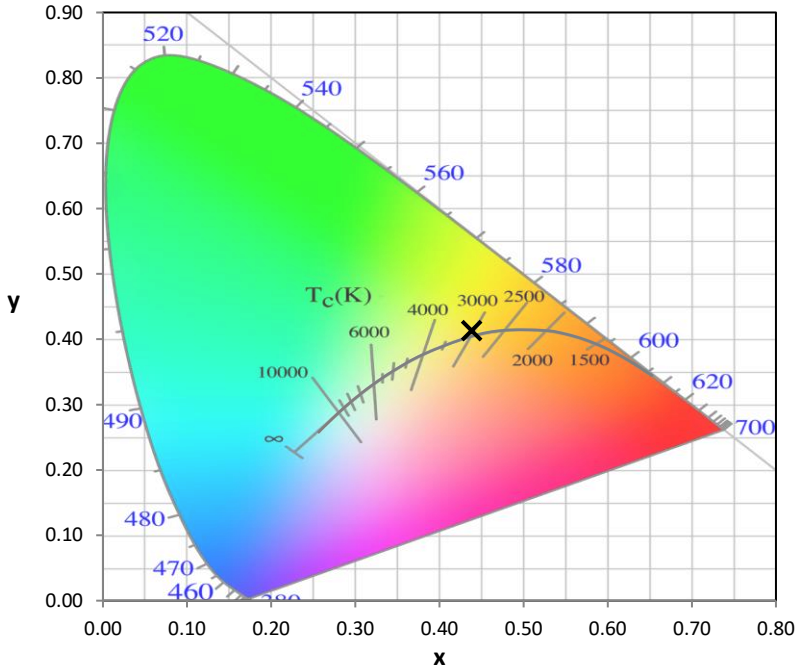
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

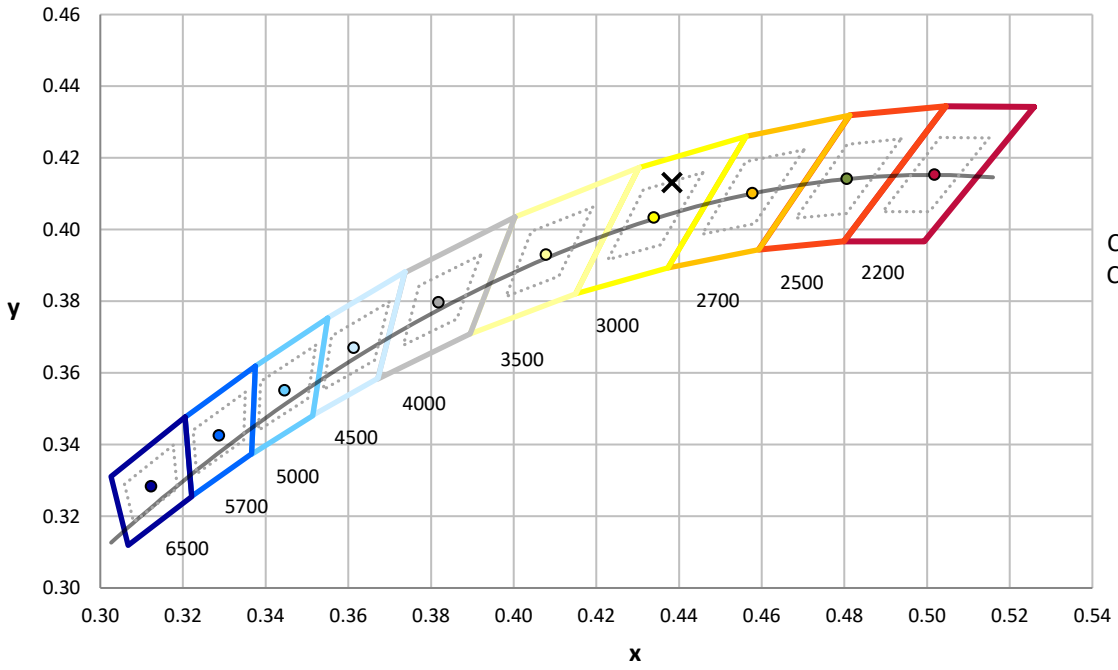
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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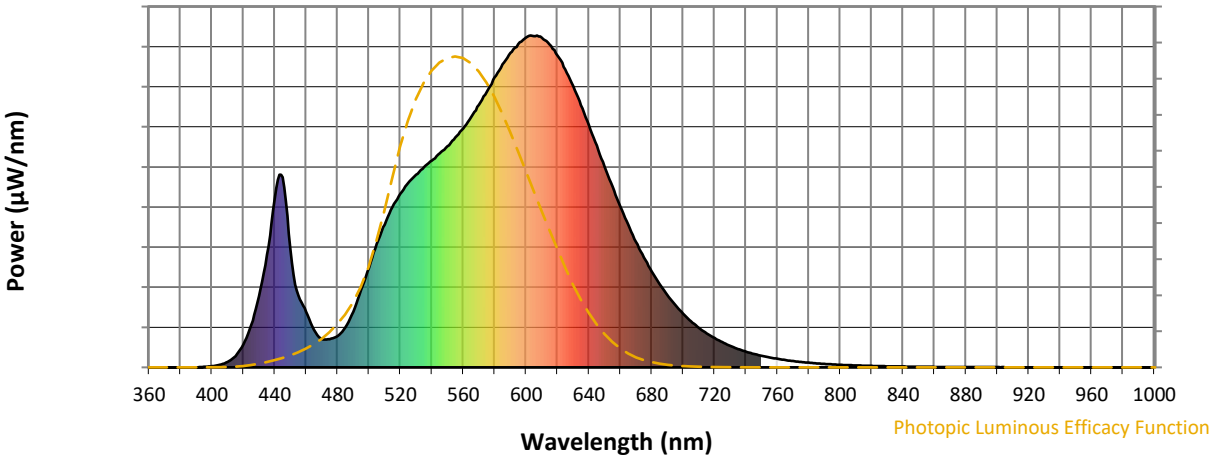
Photopic Flux vs. Wavelength



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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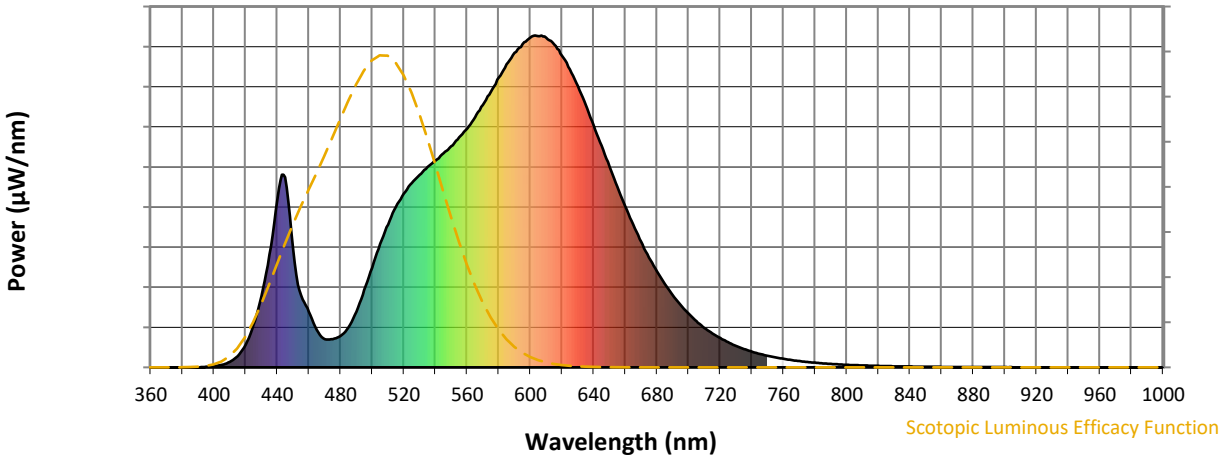
Scotopic Flux vs. Wavelength



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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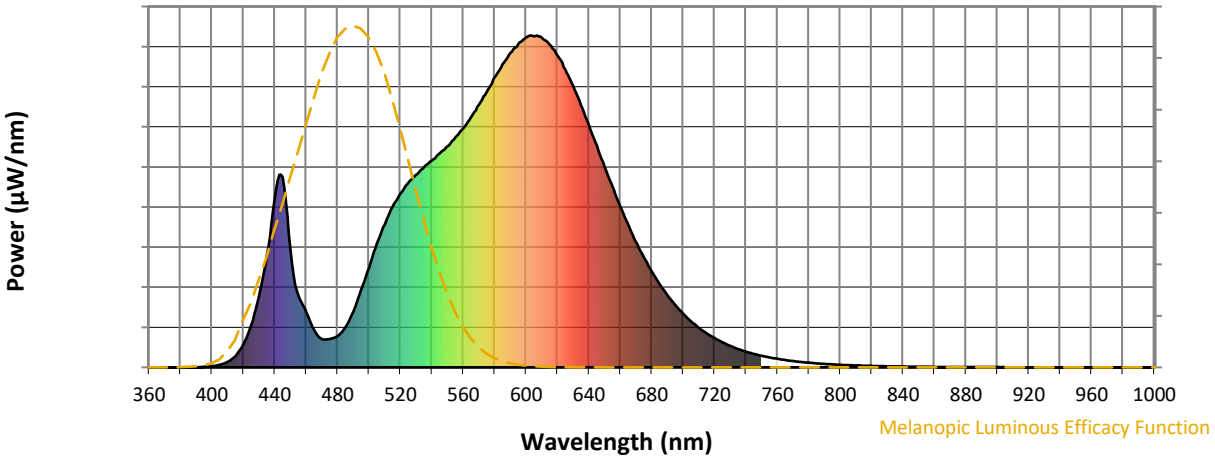
Melanopic Flux vs. Wavelength



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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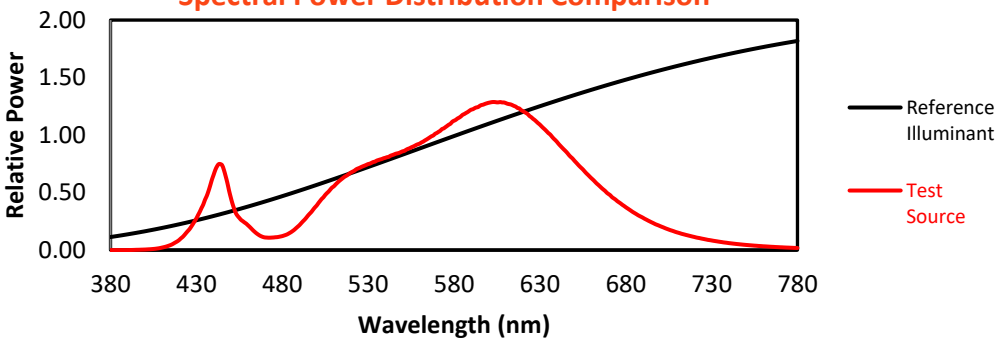
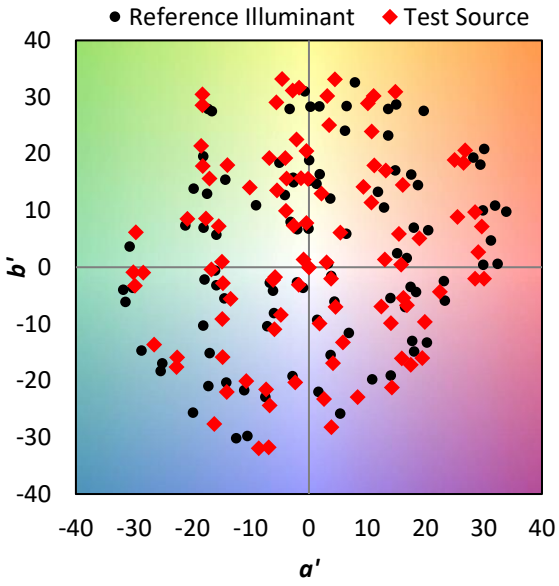
Summary

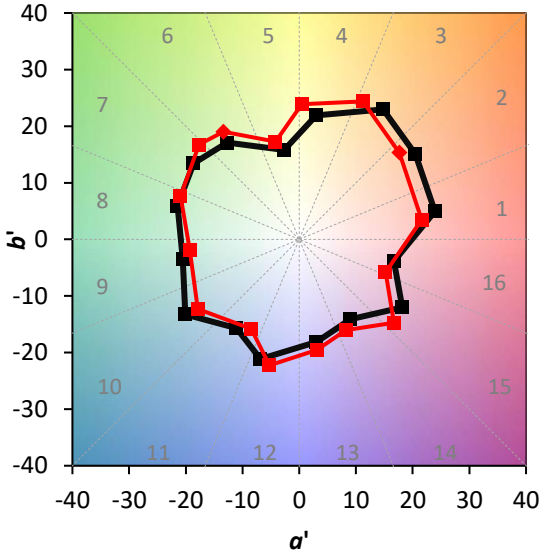
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

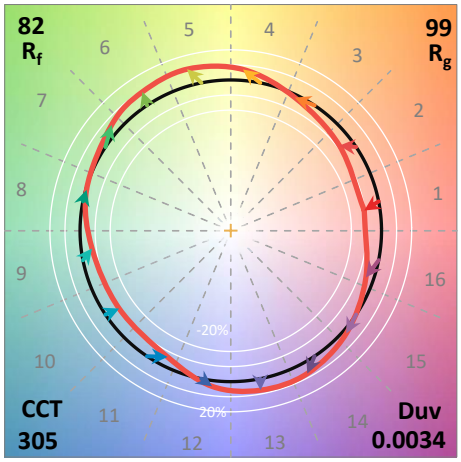
Spectral Power Distribution Comparison

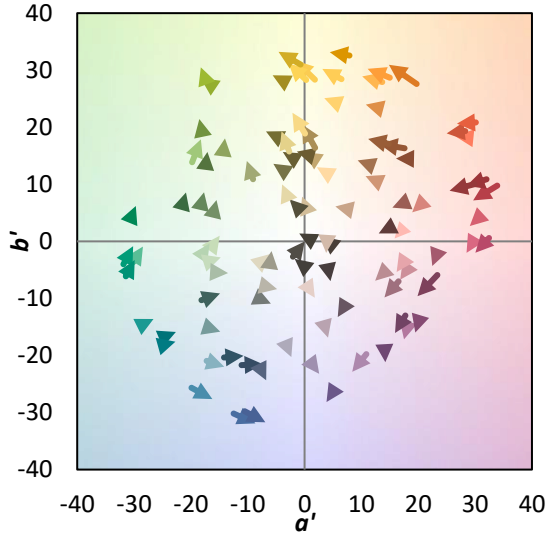


Color Vector Graphics









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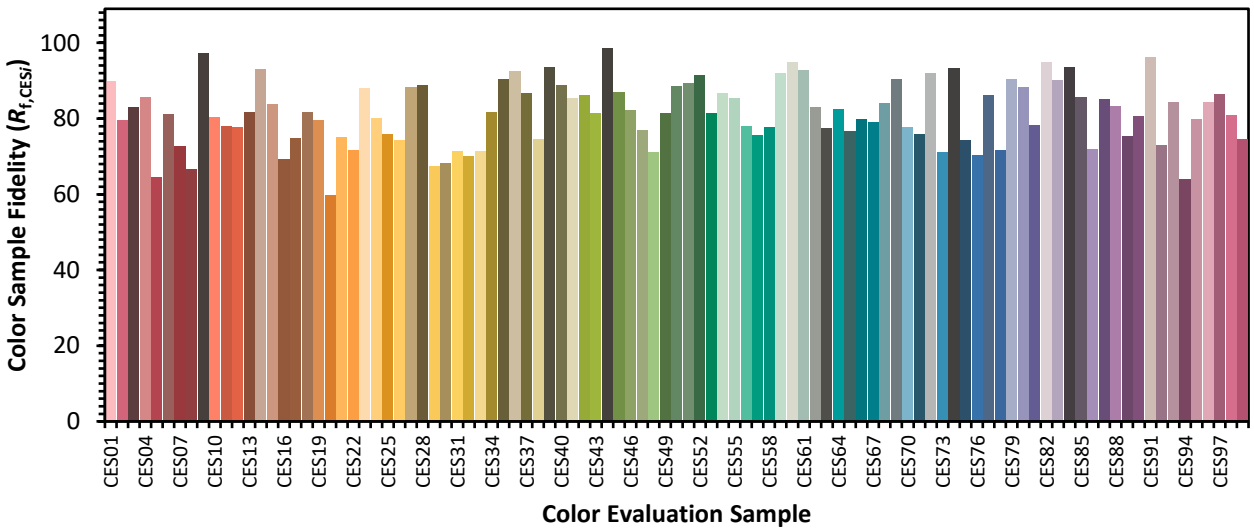
Individual Sample Fidelity Index ($R_{f,i}$)

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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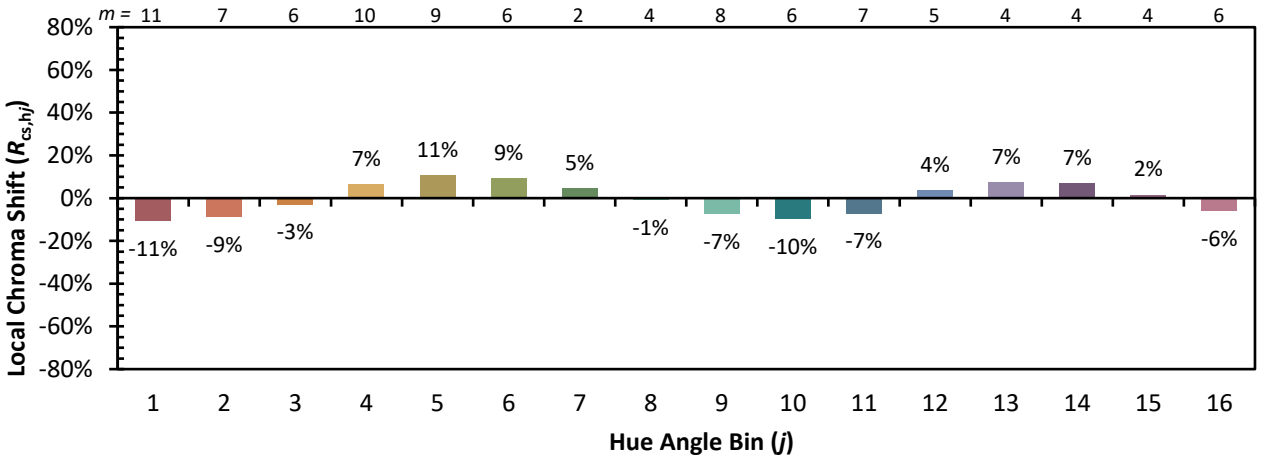
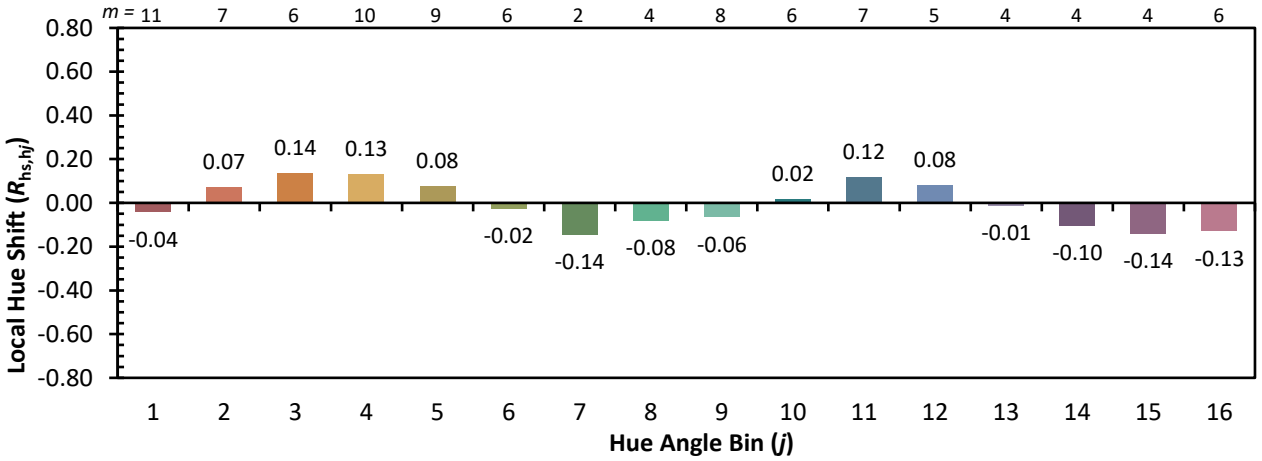
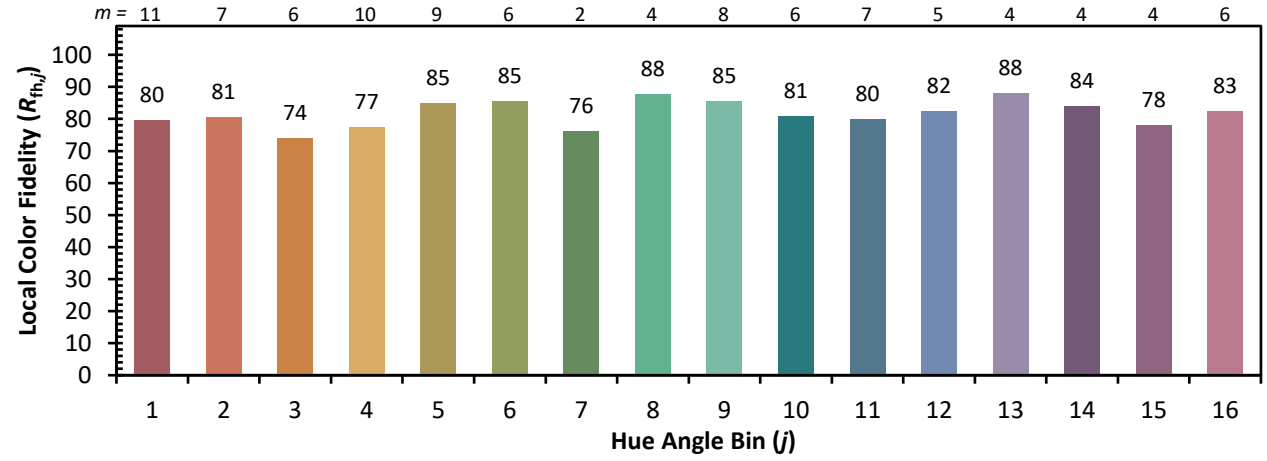
Color Rendition by Hue-Angle Bin







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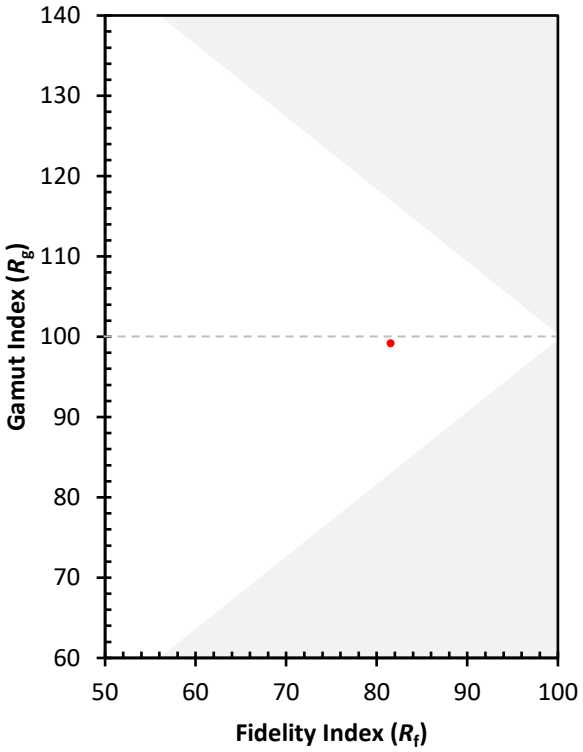
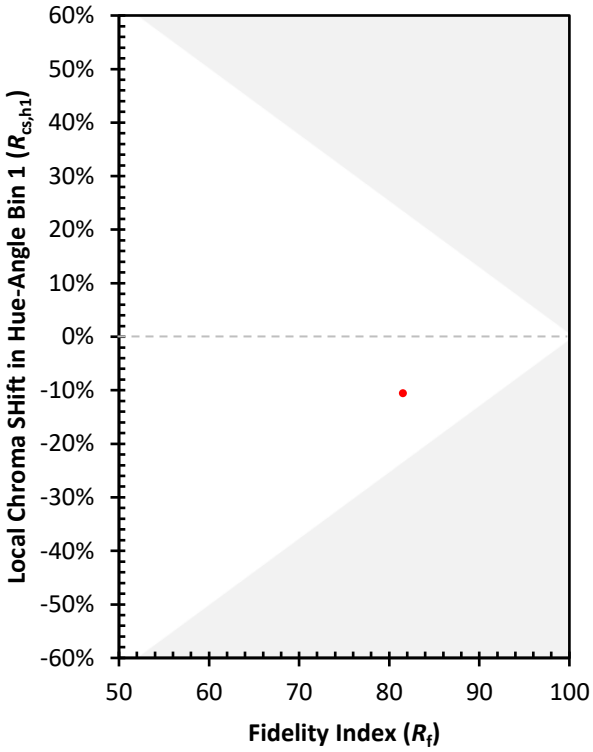
Measure Comparisons





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