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: P634039

Luminaire Tested: GWS-SA2F-830-U-T2R-W-HSS

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:	P634039
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-14)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA2F-830-U-T2R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	10393.1 lumens
Efficiency:	N/A
Efficacy:	83.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	124.5
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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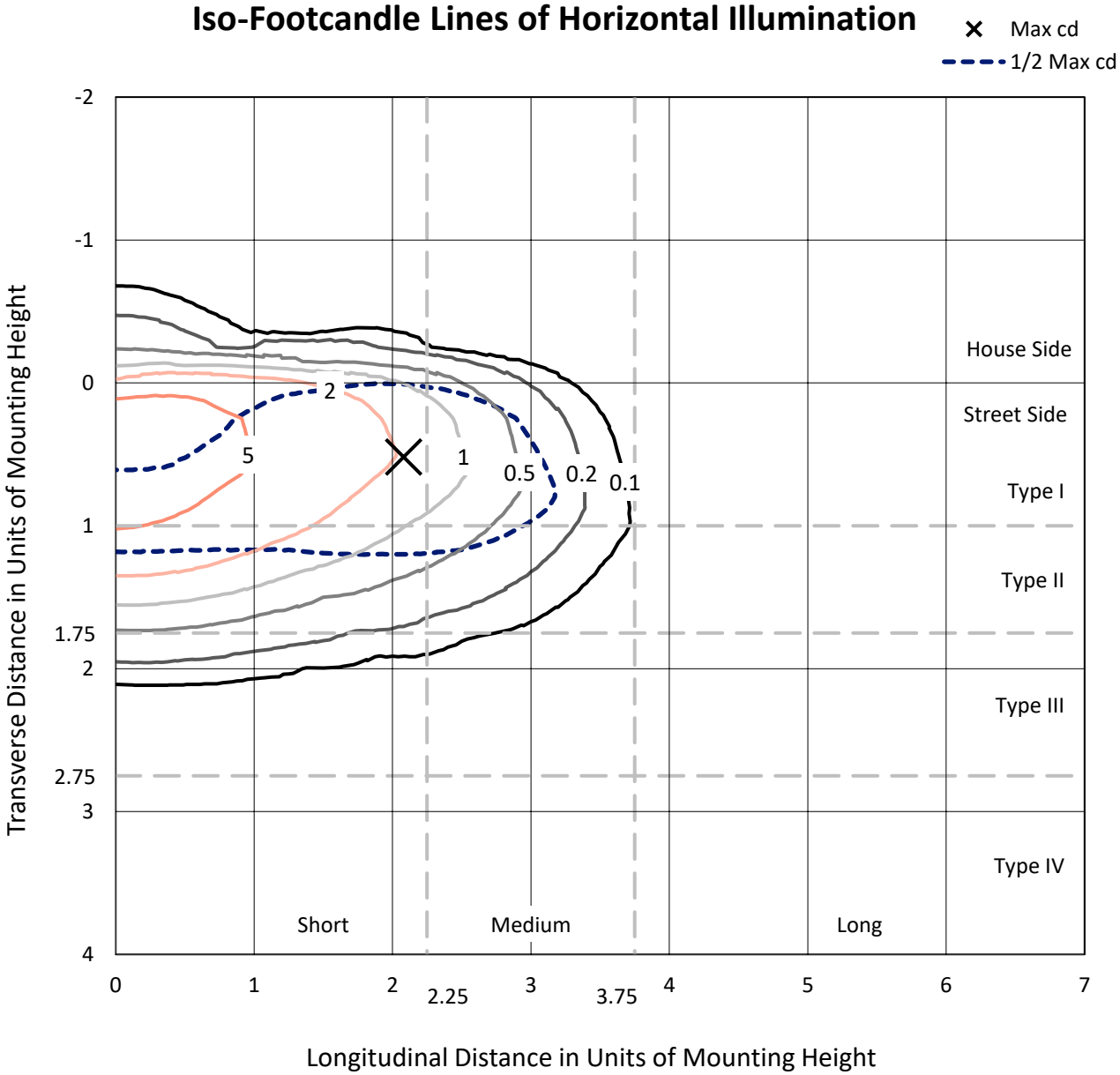
REPORT NUMBER: P634039
CATALOG NUMBER: GWS-SA2F-830-U-T2R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 7.8 fc
Type II - Short - N/A

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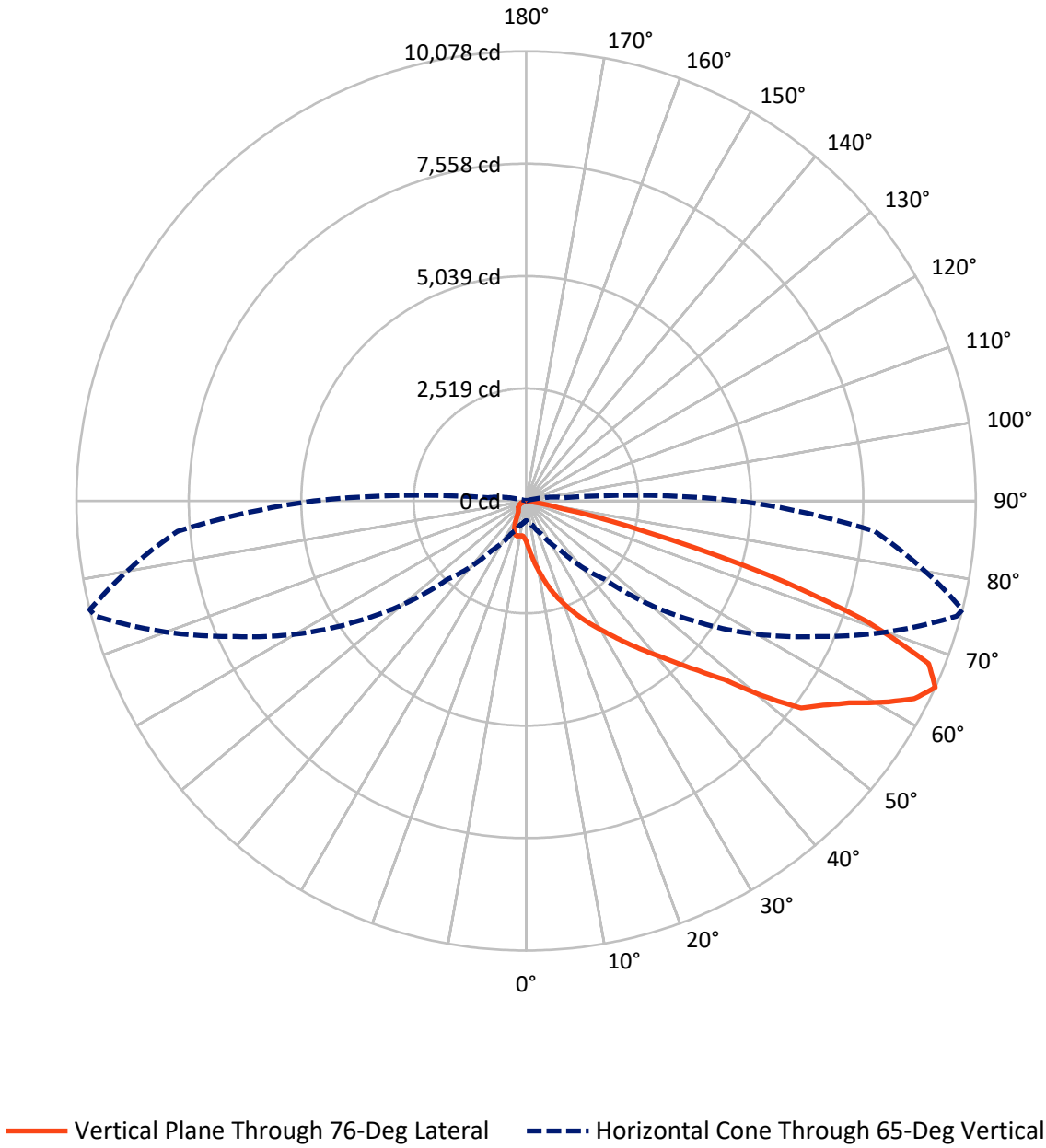
Luminous Intensity Polar Plot



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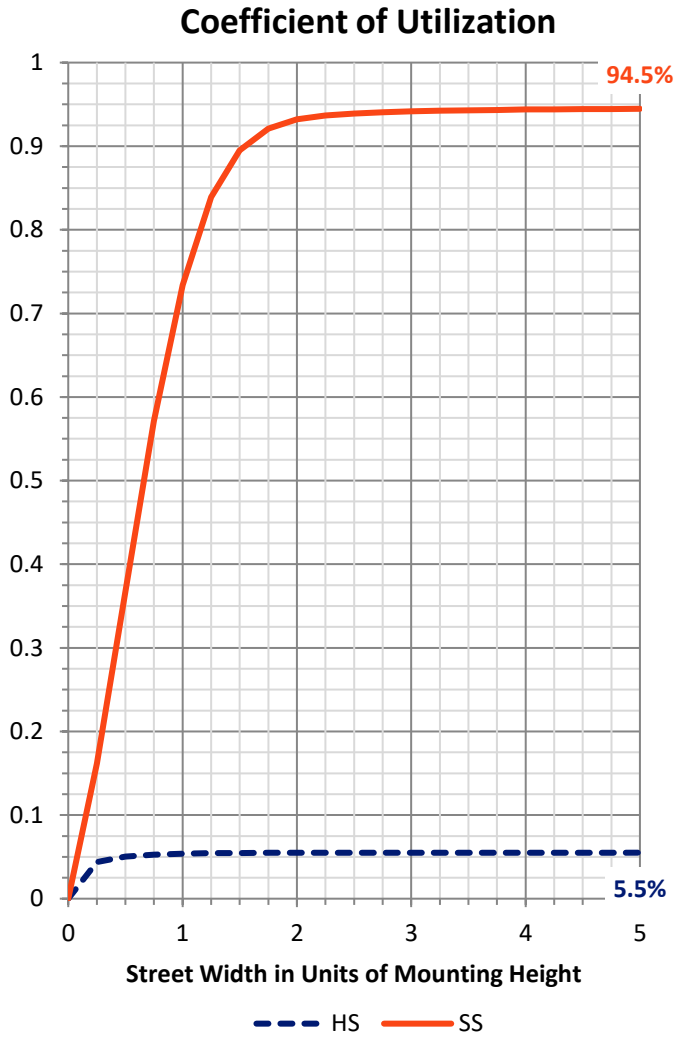
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	574.7	0.0	574.7
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	9818.4	0.0	9818.4
	% Fixture	94.5	0.0	94.5
Total	Lumens	10393.1	0.0	10393.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.9	1.1
10°-20°	424.8	4.1
20°-30°	866.6	8.3
30°-40°	1541.3	14.8
40°-50°	2278.3	21.9
50°-60°	2608.5	25.1
60°-70°	1990.2	19.1
70°-80°	557.5	5.4
80°-90°	14.0	0.1
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°	10393.1	100.0
0°-180°	10393.1	100.0



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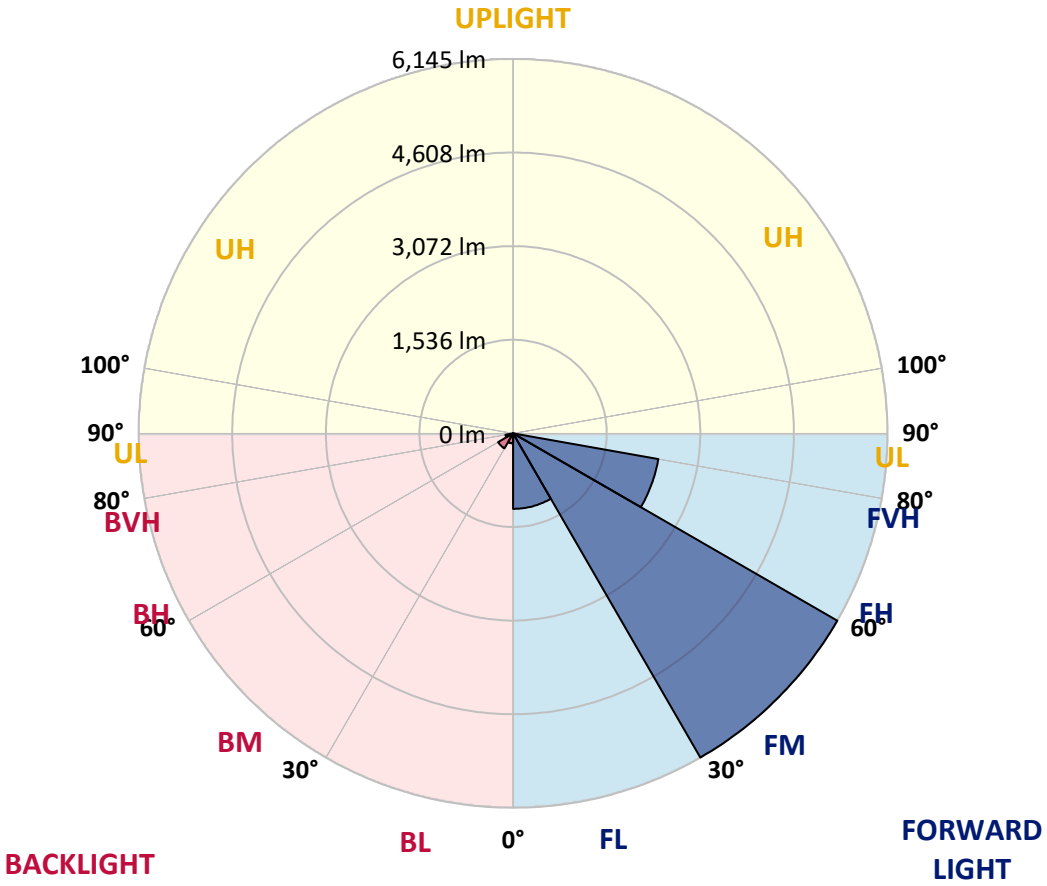
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1239.3	11.9			
FM	(30°-60°)	6144.6	59.1			
FH	(60°-80°)	2421.3	23.3			G2/5000
FVH	(80°-90°)	13.2	0.1			G1/100
BL	(0°-30°)	164.0	1.6	B1/500		
BM	(30°-60°)	283.5	2.7	B1/1000		
BH	(60°-80°)	126.3	1.2	B1/500		G1/500
BVH	(80°-90°)	0.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type II Short



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REPORT NUMBER: P634039
CATALOG NUMBER: GWS-SA2F-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	920.2	920.2	920.2	920.2	920.2	920.2	920.2	920.2	920.2	*920.2*	920.2
2.5°	1418.1	1439.4	1422.8	1395.0	1341.5	1289.7	1223.2	1131.7	1058.7	*1049.5*	981.1
5°	1915.2	1913.3	1877.3	1841.3	1784.9	1696.2	1562.3	1392.3	1228.7	*1214.9*	1061.5
7.5°	2210.8	2213.6	2193.3	2165.5	2110.1	2018.6	1879.1	1674.0	1434.8	*1407.0*	1171.5
10°	2459.3	2458.4	2443.6	2430.7	2380.8	2319.8	2170.2	1944.7	1656.5	*1613.1*	1294.3
12.5°	2645.9	2652.4	2659.8	2672.7	2651.5	2591.4	2450.1	2204.3	1881.0	*1832.9*	1434.8
15°	2793.8	2795.6	2823.3	2873.2	2890.8	2859.4	2730.9	2455.6	2102.7	*2061.1*	1596.4
17.5°	2838.1	2841.8	2888.9	2980.4	3072.8	3090.3	2993.3	2708.8	2320.7	*2276.4*	1753.5
20°	2931.4	2939.7	2974.8	3055.2	3171.6	3265.9	3228.0	2964.7	2538.8	*2480.6*	1914.2
22.5°	3225.2	3229.8	3217.8	3228.0	3288.0	3397.0	3420.1	3212.3	2762.4	*2700.5*	2087.9
25°	3730.6	3732.4	3648.3	3568.9	3523.6	3543.9	3594.8	3440.5	2984.1	*2923.1*	2249.6
27.5°	4255.3	4261.8	4161.1	4026.2	3864.5	3772.1	3757.4	3649.3	3207.7	*3140.2*	2409.4
30°	4749.6	4749.6	4643.3	4478.9	4262.7	4082.6	3976.3	3859.9	3446.9	*3373.0*	2573.0
32.5°	5194.0	5190.3	5054.5	4876.2	4662.7	4465.0	4241.5	4079.8	3713.0	*3630.8*	2761.4
35°	5560.7	5551.5	5397.2	5226.3	4998.1	4851.2	4601.8	4316.3	4001.3	*3919.0*	2955.4
37.5°	5837.9	5827.7	5686.4	5505.3	5293.7	5198.6	4989.8	4599.9	4305.2	*4230.4*	3170.7
40°	5988.5	5968.2	5870.2	5735.3	5558.0	5474.8	5388.0	4951.9	4662.7	*4569.4*	3424.8
42.5°	6032.8	6008.8	5944.1	5881.3	5774.1	5708.6	5801.9	5349.2	5055.4	*4975.0*	3714.9
45°	5901.6	5887.8	5882.2	5927.5	5946.9	5965.4	6195.4	5788.9	5488.7	*5427.7*	4079.8
47.5°	5585.7	5582.0	5631.0	5819.4	6024.5	6219.5	6623.2	6331.2	6050.4	*5984.8*	4589.8
50°	5001.8	5039.7	5176.4	5507.2	5917.3	6363.6	7023.2	7083.3	6959.5	*6863.4*	5254.9
52.5°	4089.0	4162.0	4468.7	4971.3	5560.7	6322.9	7208.0	7685.6	7812.2	*7712.4*	5731.7
55°	3208.6	3276.9	3550.4	4187.9	4974.1	6013.4	7216.3	7893.5	8169.7	*8077.3*	6054.1
57.5°	2390.0	2452.9	2701.4	3311.1	4175.9	5404.6	7018.6	8009.0	8593.8	*8534.7*	6563.1
60°	1562.3	1624.2	1848.7	2381.7	3239.1	4517.7	6531.7	7985.0	9171.2	*9165.7*	7188.6
62.5°	866.6	915.5	1078.1	1493.9	2260.7	3498.7	5766.8	7743.8	9730.1	*9765.2*	7704.1
65°	*443.5*	*474.9*	*573.7*	*821.3*	*1368.2*	*2480.6*	*4760.7*	*7191.4*	*9988.8*	*10077.5*	*7839.9*
67.5°	290.1	300.3	324.3	426.8	732.6	1560.4	3582.7	6305.4	9624.8	*9728.3*	7384.4
70°	235.6	243.9	257.8	284.6	377.9	828.7	2353.1	5036.0	8042.2	*8112.4*	5880.4
72.5°	172.8	183.8	210.6	228.2	272.5	454.5	1224.1	3305.6	5522.9	*5646.7*	3695.5
75°	127.5	134.0	156.1	180.2	222.7	287.3	468.4	1737.8	2852.0	*2779.9*	1552.1
77.5°	76.7	81.3	99.8	115.5	158.9	179.2	163.5	642.1	867.5	*815.8*	375.1
80°	37.9	42.5	65.6	86.8	101.6	72.1	68.4	179.2	193.1	*193.1*	94.2
82.5°	12.9	16.6	35.1	57.3	49.9	27.7	32.3	46.2	51.7	*54.5*	27.7
85°	0.0	0.0	8.3	16.6	7.4	3.7	8.3	10.2	12.9	*13.9*	9.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.8	*3.7*	3.7
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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CATALOG NUMBER: GWS-SA2F-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	920.2	920.2	920.2	920.2	920.2	920.2	920.2	920.2	920.2	920.2	920.2
2.5°	944.2	900.8	835.2	776.0	730.8	688.3	655.9	630.1	625.5	610.7	612.5
5°	986.7	908.2	787.1	693.8	628.2	583.9	546.9	519.2	507.2	495.2	486.0
7.5°	1052.3	938.6	768.7	655.0	578.3	510.0	452.7	406.5	384.3	370.5	361.2
10°	1132.7	981.1	769.6	631.9	518.3	413.9	335.4	284.6	260.5	253.1	252.2
12.5°	1228.7	1034.7	777.0	594.0	431.4	307.6	248.5	225.4	218.0	211.6	211.6
15°	1330.4	1094.8	777.0	524.8	328.9	240.2	215.3	200.5	191.2	187.5	185.7
17.5°	1437.5	1151.1	758.5	429.6	252.2	211.6	191.2	177.4	170.0	164.4	162.6
20°	1552.1	1204.7	712.3	328.9	216.2	189.4	170.0	156.1	148.7	143.2	143.2
22.5°	1668.5	1254.6	637.5	253.1	191.2	168.1	149.7	136.7	129.3	123.8	123.8
25°	1776.6	1287.9	541.4	208.8	172.8	149.7	133.0	120.1	111.8	108.1	106.2
27.5°	1877.3	1309.1	435.1	183.8	155.2	134.0	116.4	104.4	97.9	95.2	93.3
30°	1981.7	1314.7	332.6	167.2	140.4	118.3	101.6	92.4	86.8	83.1	83.1
32.5°	2083.3	1308.2	254.1	153.4	127.5	104.4	90.5	82.2	77.6	74.8	73.9
35°	2186.8	1278.6	206.0	141.4	114.6	91.5	80.4	73.9	71.1	67.4	67.4
37.5°	2299.5	1238.9	179.2	129.3	101.6	82.2	72.1	67.4	63.7	61.0	60.1
40°	2439.9	1192.7	164.4	119.2	89.6	73.9	64.7	60.1	57.3	54.5	53.6
42.5°	2606.2	1147.4	157.1	108.1	80.4	65.6	58.2	52.7	49.9	46.2	45.3
45°	2841.8	1137.3	148.7	96.1	72.1	59.1	50.8	45.3	41.6	38.8	37.9
47.5°	3220.6	1165.9	134.9	83.1	63.7	51.7	43.4	38.8	34.2	31.4	29.6
50°	3596.6	1158.5	121.0	72.1	56.4	44.3	37.0	32.3	27.7	24.9	24.0
52.5°	3801.7	1123.4	108.1	63.7	49.0	37.9	31.4	25.9	23.1	20.3	19.4
55°	3987.4	1109.6	95.2	55.4	41.6	33.3	25.9	21.2	19.4	16.6	15.7
57.5°	4351.4	1141.9	84.1	48.0	36.0	28.6	22.2	17.6	15.7	12.9	12.0
60°	4732.0	1145.6	72.1	41.6	31.4	24.0	17.6	13.9	12.0	9.2	8.3
62.5°	4930.7	1052.3	59.1	35.1	25.9	20.3	14.8	11.1	9.2	5.5	5.5
65°	*4764.4*	*850.9*	*49.9*	*28.6*	*20.3*	*15.7*	*11.1*	*8.3*	*5.5*	*2.8*	*0.9*
67.5°	4216.5	605.1	41.6	23.1	14.8	11.1	8.3	5.5	0.9	0.0	0.0
70°	3087.6	345.5	32.3	16.6	11.1	7.4	5.5	2.8	0.0	0.0	0.0
72.5°	1897.6	184.8	24.0	11.1	8.3	5.5	4.6	1.8	0.0	0.0	0.0
75°	719.7	88.7	14.8	7.4	6.5	4.6	2.8	0.9	0.0	0.0	0.0
77.5°	194.9	43.4	8.3	5.5	4.6	2.8	1.8	0.0	0.0	0.0	0.0
80°	50.8	20.3	5.5	3.7	2.8	1.8	0.0	0.0	0.0	0.0	0.0
82.5°	17.6	9.2	2.8	2.8	1.8	0.9	0.0	0.0	0.0	0.0	0.0
85°	7.4	3.7	1.8	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

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

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

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

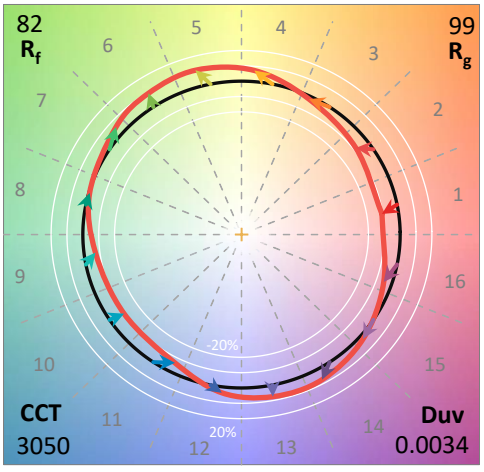
Test Information

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

Spectral Parameters

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

Rf:	81.5
Rg:	99.2



Test Conditions

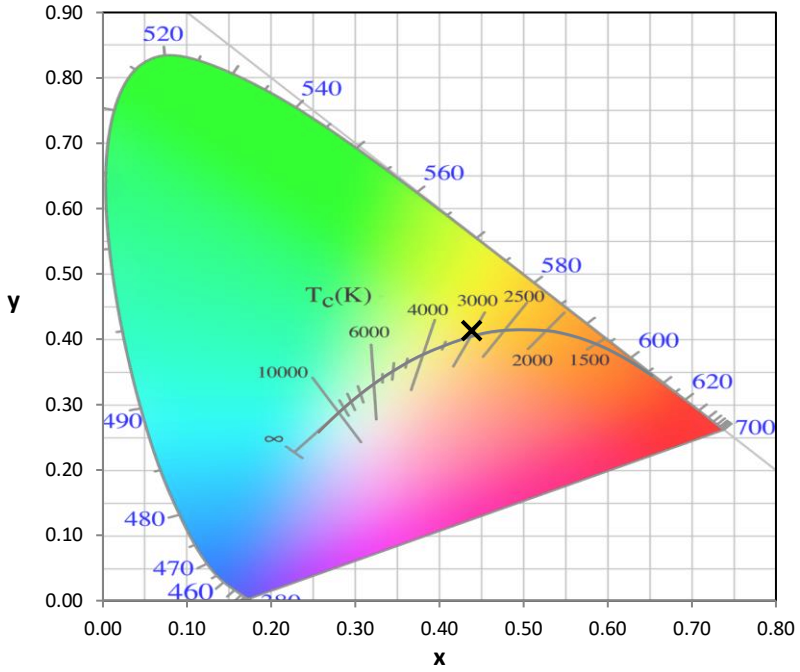
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

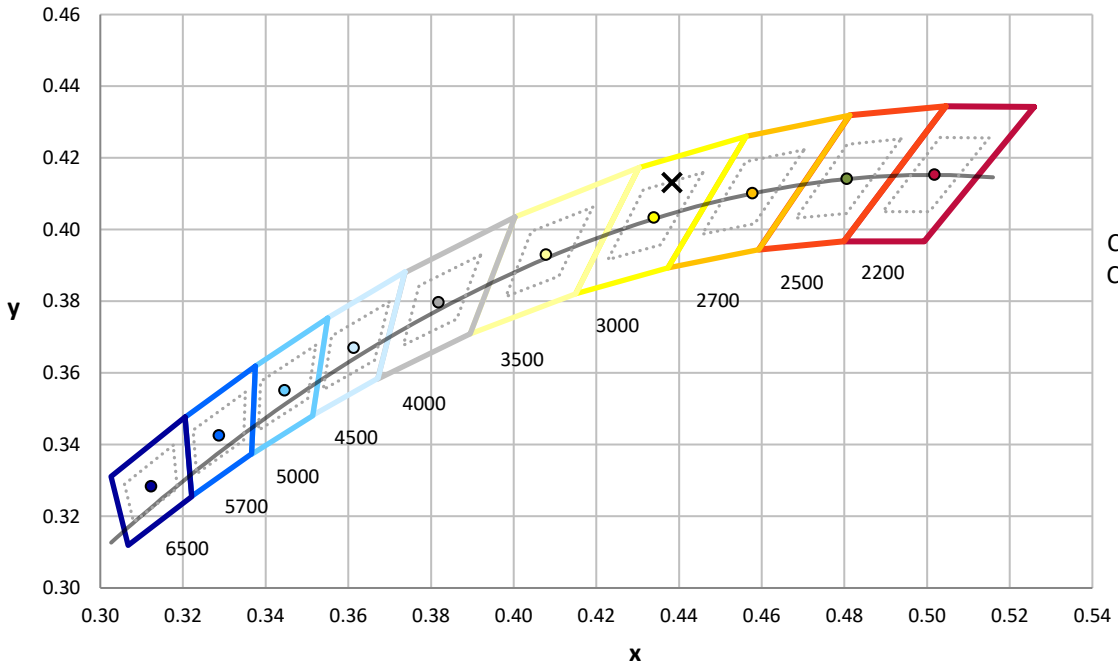
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



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

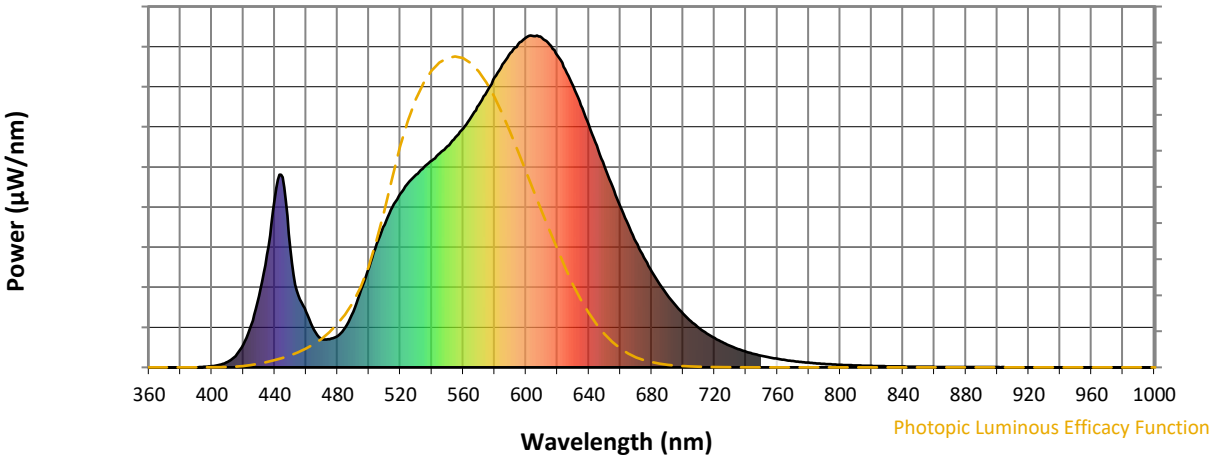


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

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

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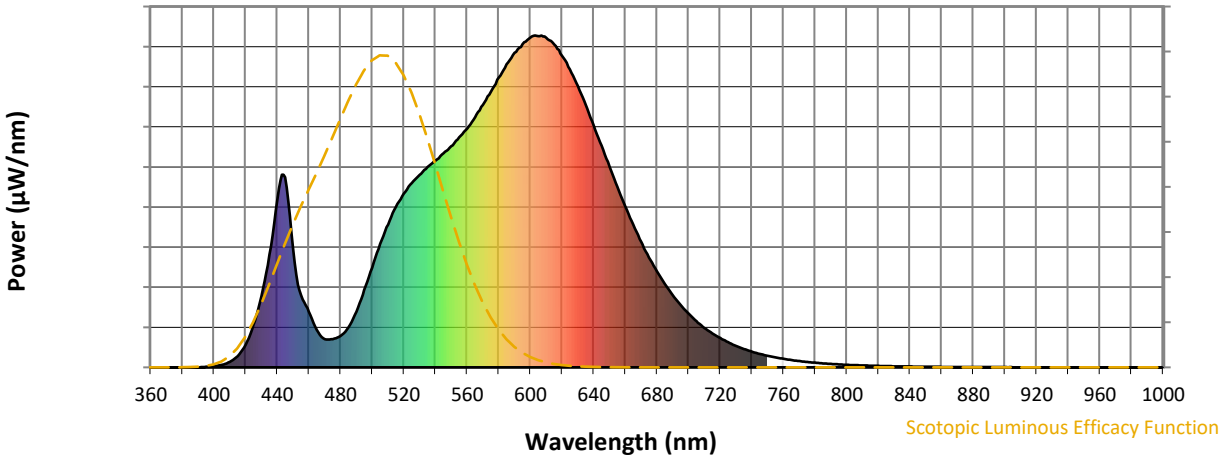
Scotopic Flux vs. Wavelength



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

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

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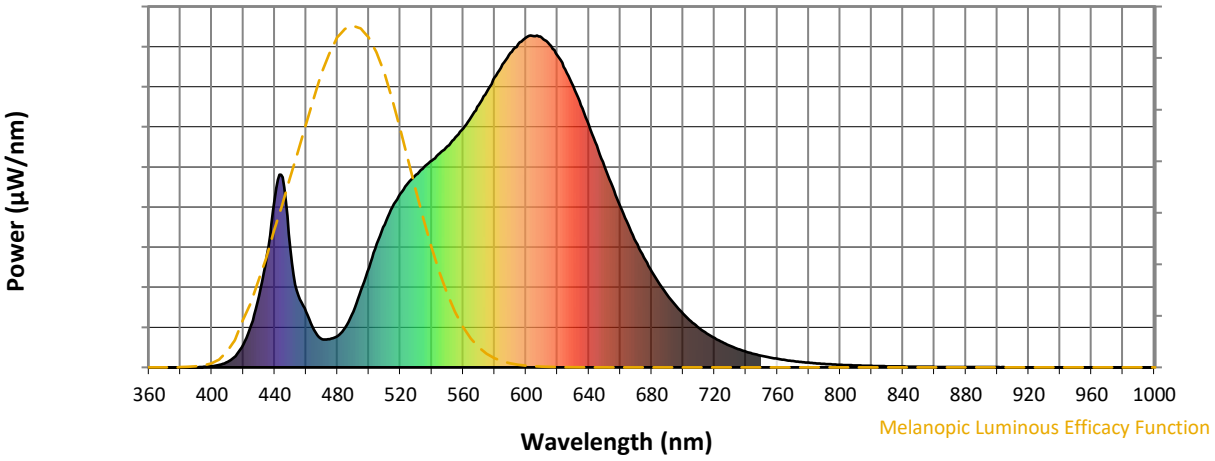
Melanopic Flux vs. Wavelength



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

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

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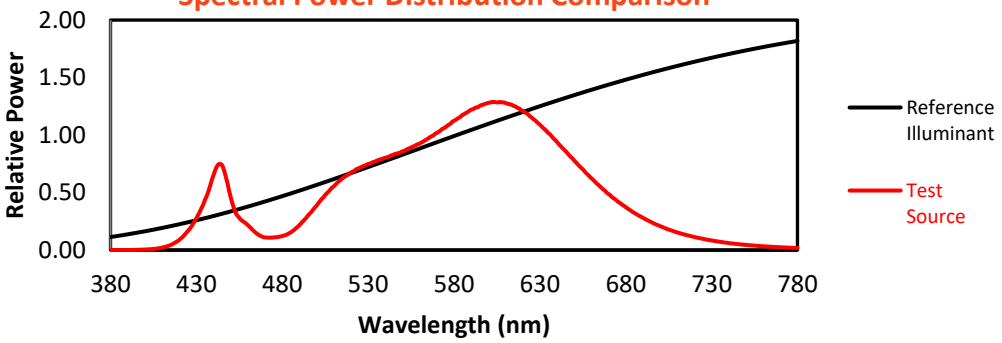
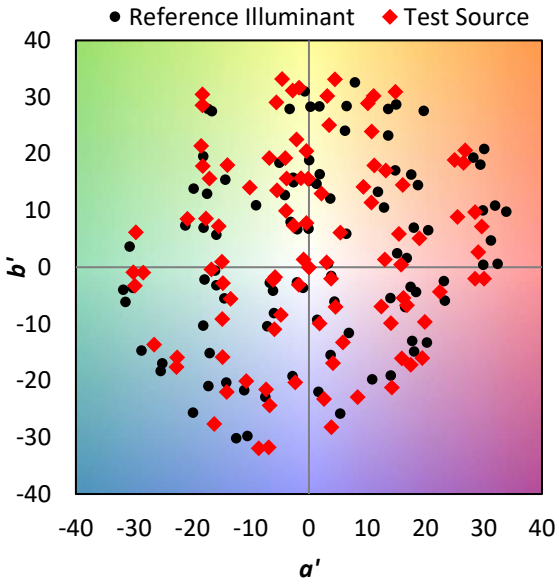
Summary

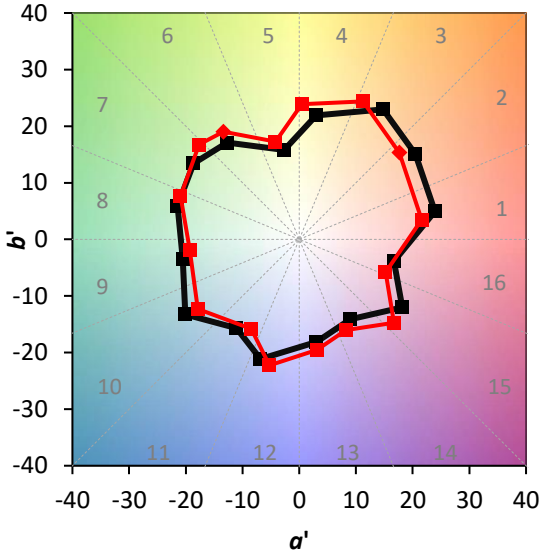
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

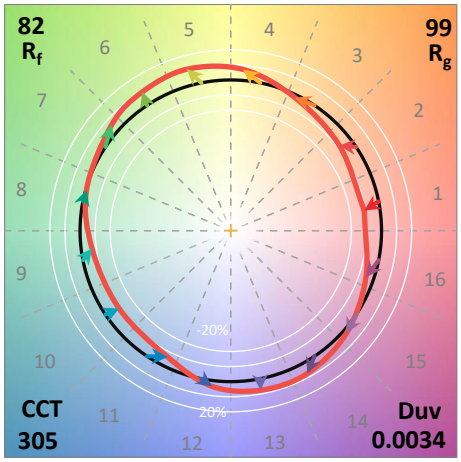
Spectral Power Distribution Comparison

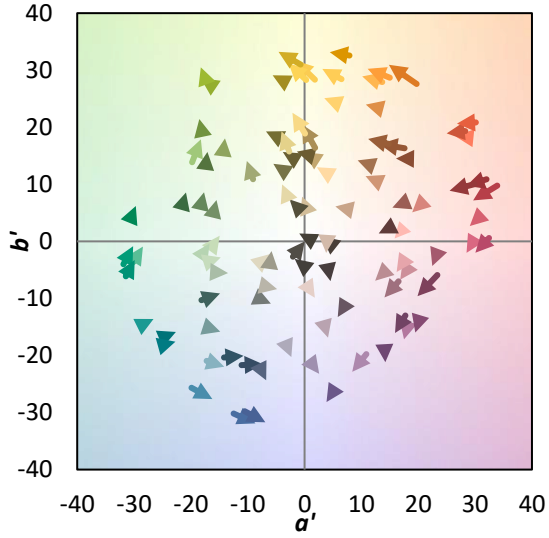


Color Vector Graphics









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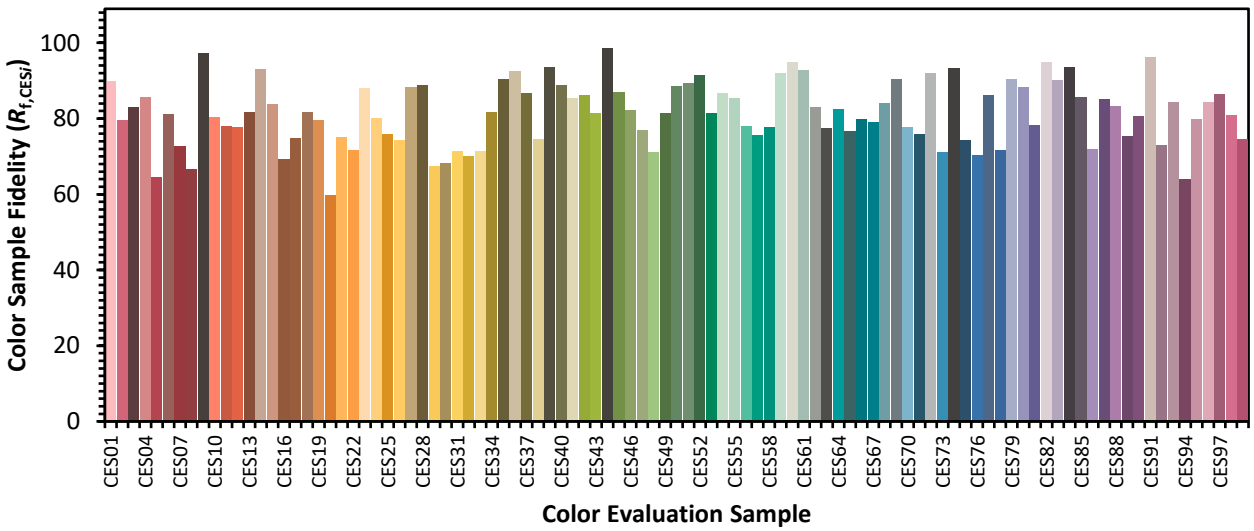
Individual Sample Fidelity Index ($R_{f,i}$)

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



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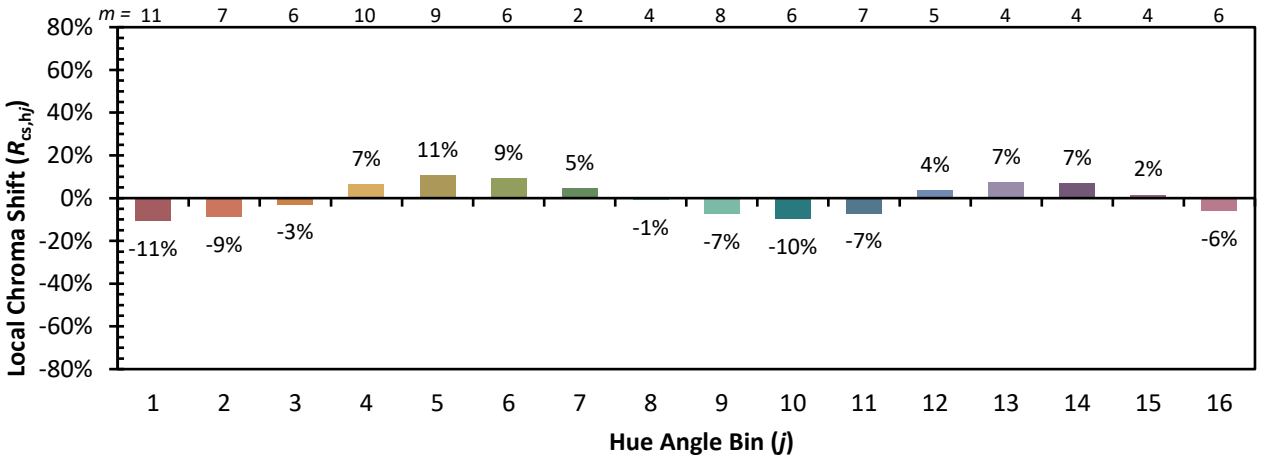
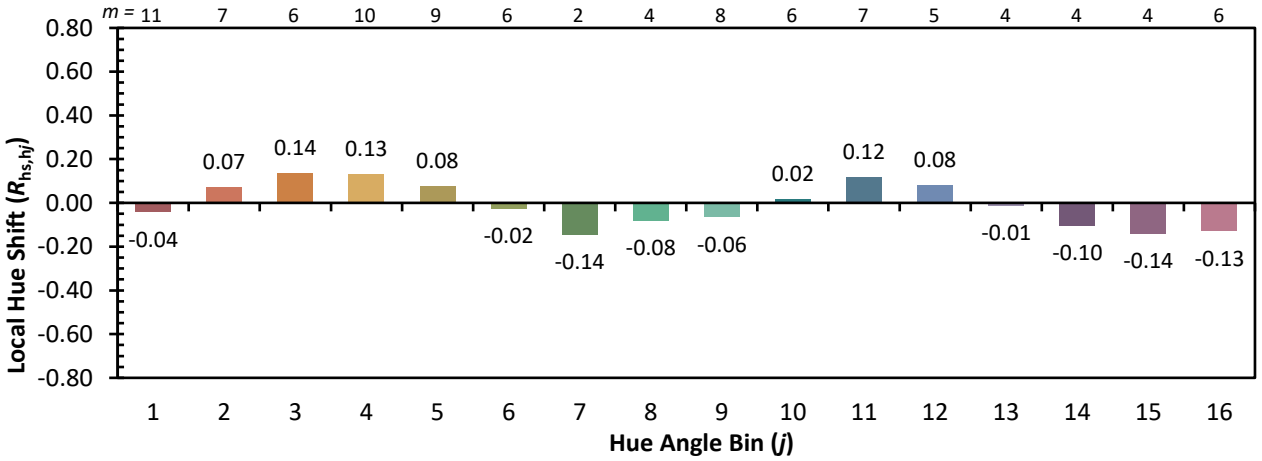
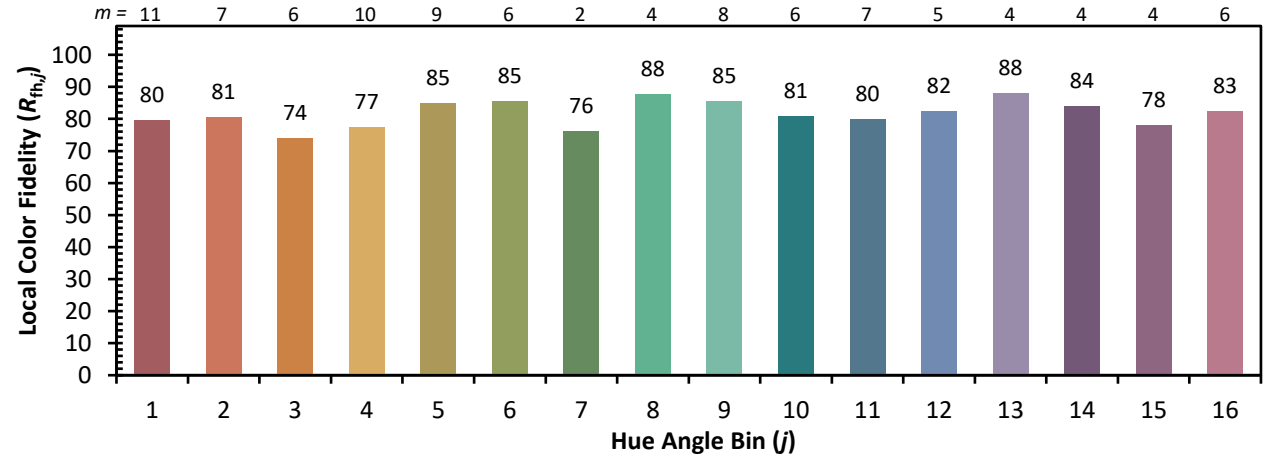
Color Rendition by Hue-Angle Bin







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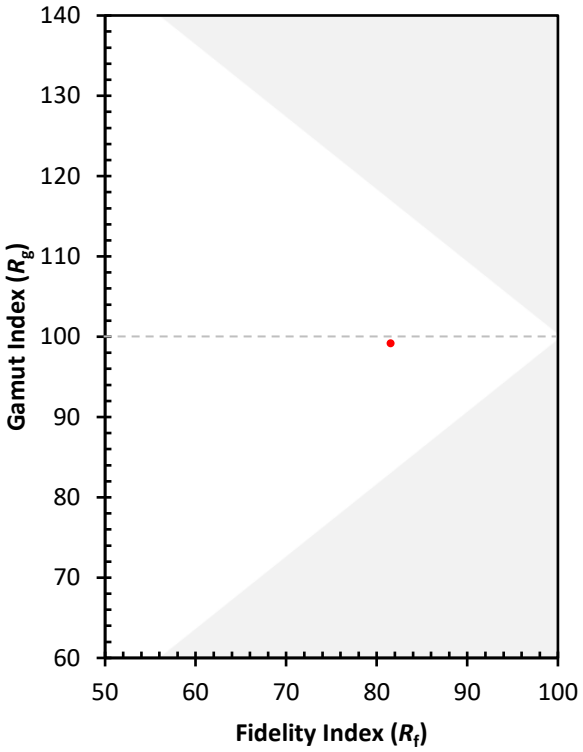
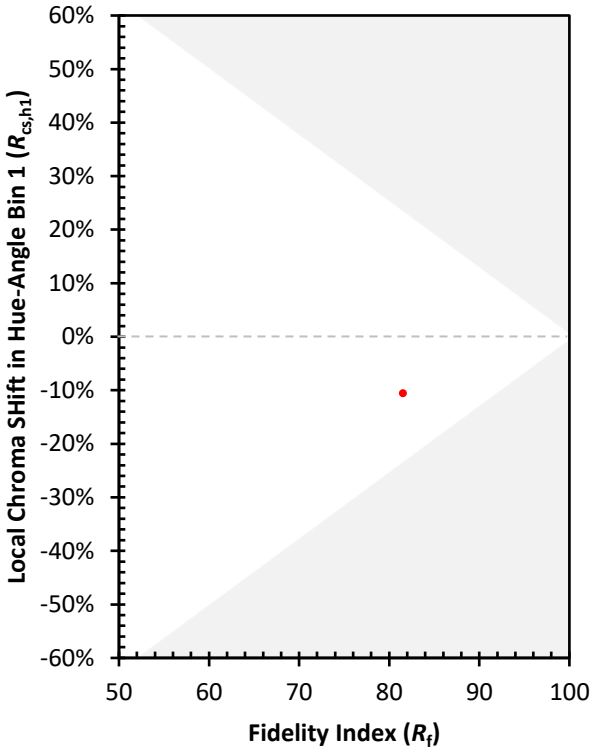
Measure Comparisons





(END OF REPORT)