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: P636027

Luminaire Tested: GWS-SA3E-830-U-T3R-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:	P636027
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-18)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3E-830-U-T3R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	13675.8 lumens
Efficiency:	N/A
Efficacy:	85.9 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B1 - U0 - G3

Input Watts (W):	159.2
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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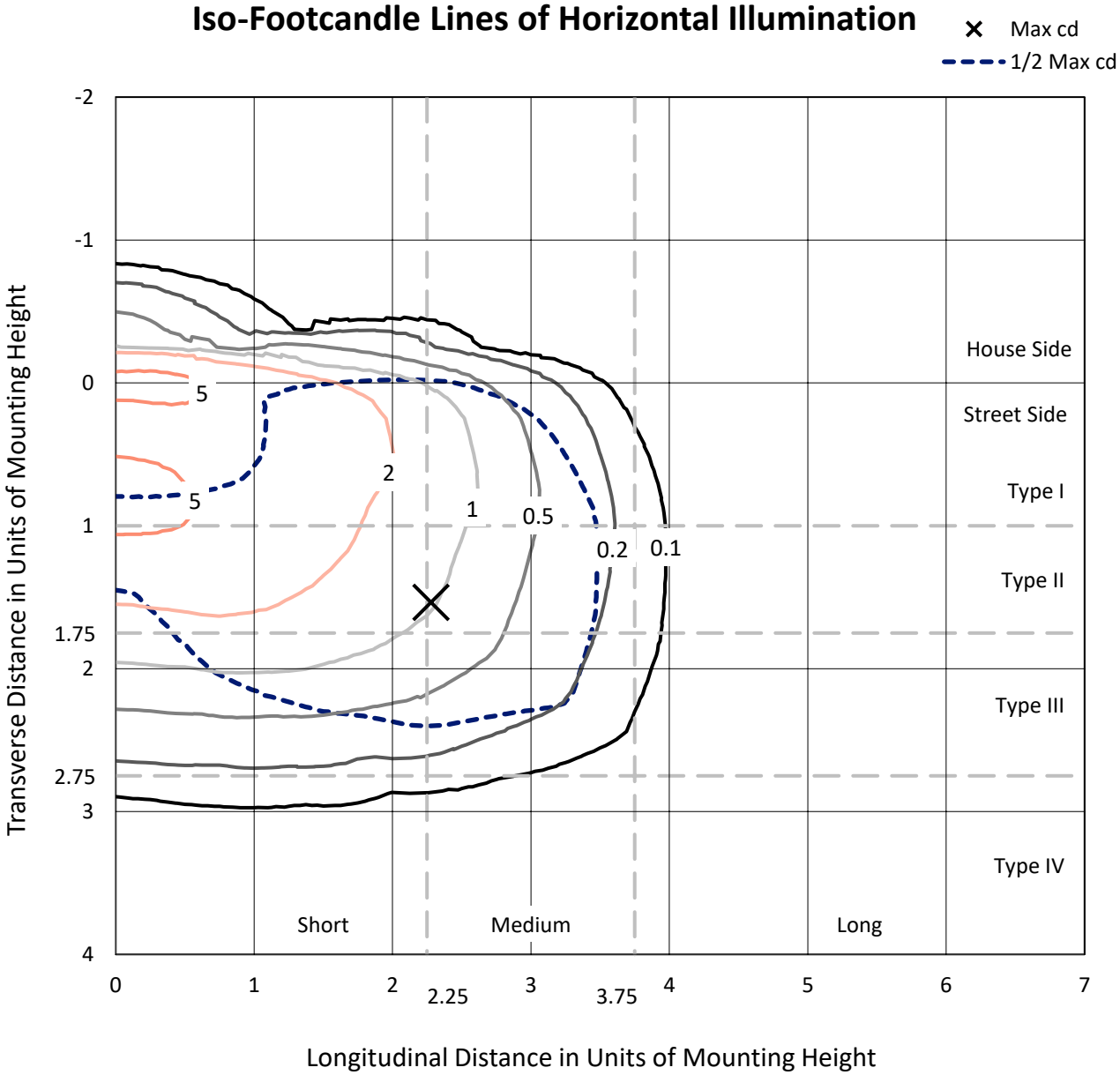
Scaled Data Report

REPORT NUMBER: P636027
CATALOG NUMBER: GWS-SA3E-830-U-T3R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 6.5 fc
Type III - Medium - N/A

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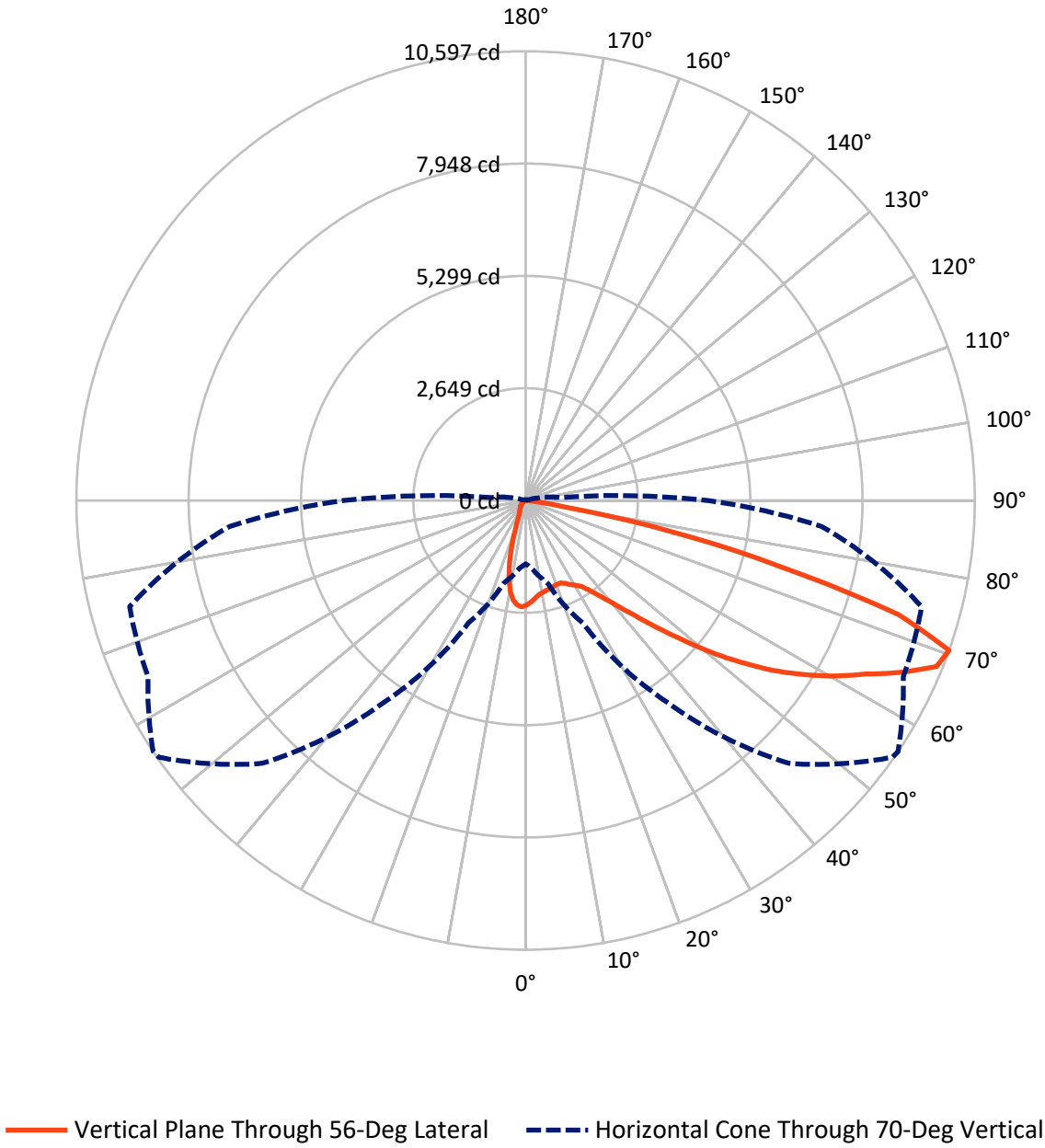
Luminous Intensity Polar Plot



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REPORT NUMBER: P636027
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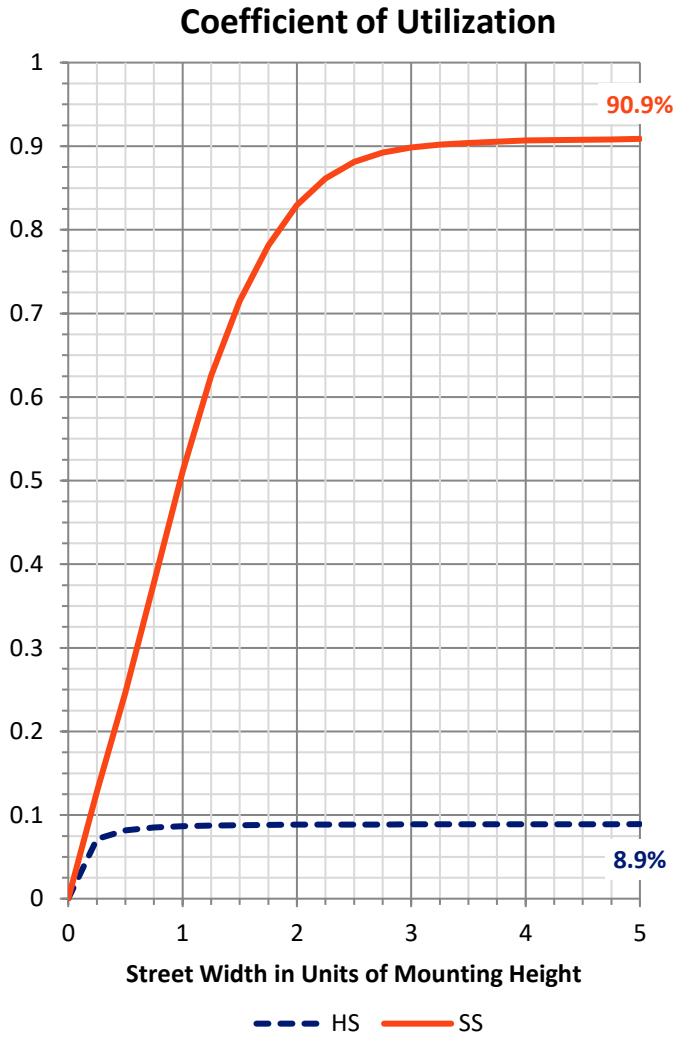
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1228.3	0.0	1228.3
	% Fixture	9.0	0.0	9.0
Street Side	Lumens	12447.4	0.0	12447.4
	% Fixture	91.0	0.0	91.0
Total	Lumens	13675.8	0.0	13675.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.7	1.5
10°-20°	476.2	3.5
20°-30°	754.3	5.5
30°-40°	1300.7	9.5
40°-50°	2196.5	16.1
50°-60°	3227.3	23.6
60°-70°	3826.2	28.0
70°-80°	1631.6	11.9
80°-90°	51.2	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°	13675.8	100.0
0°-180°	13675.8	100.0



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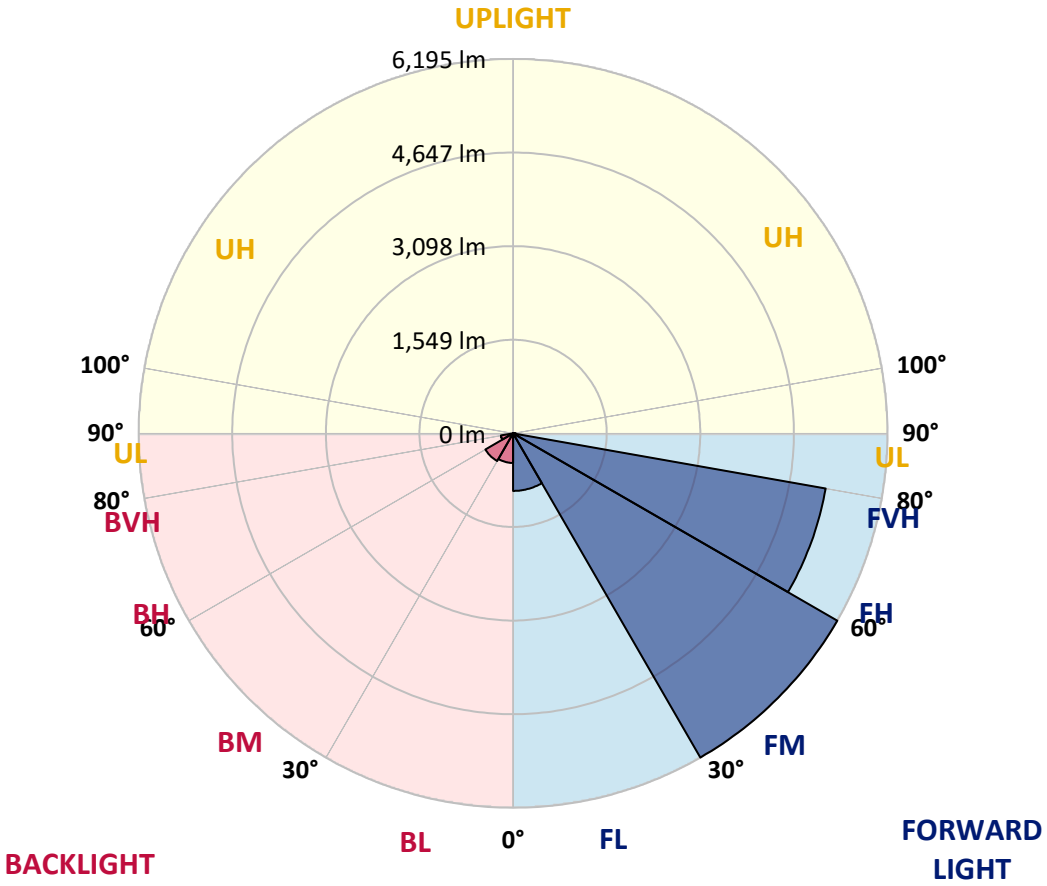
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	953.0	7.0			
FM	(30°-60°)	6195.5	45.3			
FH	(60°-80°)	5253.0	38.4			G3/7500
FVH	(80°-90°)	46.0	0.3			G1/100
BL	(0°-30°)	489.2	3.6	B1/500		
BM	(30°-60°)	529.1	3.9	B1/1000		
BH	(60°-80°)	204.9	1.5	B1/500		G1/500
BVH	(80°-90°)	5.2	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-G3
Type III Medium



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Scaled Data Report

REPORT NUMBER: P636027
CATALOG NUMBER: GWS-SA3E-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9
2.5°	2295.6	2291.8	2294.3	2313.1	2348.2	2364.4	2392.0	2397.0	2419.5	2448.4	2459.6
5°	2146.5	2134.0	2140.3	2166.6	2206.6	2251.7	2303.1	2316.9	2373.2	2437.1	2484.7
7.5°	2010.0	1996.3	2011.3	2052.6	2109.0	2157.8	2234.2	2243.0	2333.1	2445.8	2532.3
10°	1795.9	1799.6	1829.7	1902.3	1988.7	2090.2	2192.9	2205.4	2316.9	2474.7	2608.7
12.5°	1631.8	1623.1	1655.6	1738.3	1859.7	2007.5	2161.6	2177.8	2318.1	2518.5	2706.3
15°	1555.4	1552.9	1566.7	1626.8	1744.5	1918.6	2132.8	2154.0	2334.4	2558.6	2799.0
17.5°	1557.9	1554.2	1552.9	1588.0	1675.6	1852.2	2101.4	2129.0	2348.2	2602.4	2896.7
20°	1666.9	1649.3	1618.0	1601.8	1654.4	1809.7	2080.2	2111.5	2368.2	2648.7	3000.6
22.5°	1894.8	1901.1	1817.2	1729.5	1704.5	1814.7	2077.7	2114.0	2412.0	2721.4	3128.4
25°	2350.7	2340.6	2185.4	1988.7	1852.2	1872.3	2121.5	2165.3	2498.4	2825.3	3248.6
27.5°	2921.7	2930.5	2717.6	2404.5	2119.0	1991.2	2201.6	2245.5	2598.6	2890.4	3328.8
30°	3544.2	3535.4	3307.5	2960.6	2497.2	2189.1	2281.8	2320.6	2648.7	2925.5	3411.4
32.5°	4132.8	4112.7	3887.3	3524.1	2979.3	2501.0	2392.0	2414.5	2715.1	3001.9	3522.9
35°	4635.0	4633.7	4437.1	4050.1	3475.3	2891.7	2581.1	2599.9	2839.1	3123.4	3686.9
37.5°	5153.4	5135.9	4915.5	4562.3	3985.0	3320.0	2870.4	2862.9	3034.5	3302.5	3888.6
40°	5579.2	5568.0	5398.9	5059.5	4514.7	3793.4	3221.1	3198.5	3266.1	3550.4	4169.1
42.5°	5894.8	5896.1	5843.5	5636.8	5075.8	4340.7	3661.9	3626.8	3625.6	3924.9	4539.8
45°	6134.0	6150.3	6229.2	6197.9	5738.3	4978.1	4226.7	4190.4	4129.0	4410.8	4964.3
47.5°	6245.5	6266.8	6504.7	6630.0	6318.1	5610.5	4899.2	4822.8	4702.6	5057.0	5439.0
50°	6234.2	6271.8	6603.7	6984.4	6844.1	6251.7	5631.8	5595.5	5398.9	5740.8	5908.6
52.5°	5978.7	6058.9	6609.9	7199.8	7248.6	6842.9	6389.5	6321.9	6226.7	6454.6	6349.4
55°	5284.9	5382.6	6345.7	7268.7	7564.2	7358.8	7130.9	7075.8	6918.0	7128.4	6733.9
57.5°	4908.0	4991.9	5789.6	7234.8	7832.2	7836.0	7790.9	7745.8	7615.6	7794.6	7184.8
60°	4681.3	4765.2	5492.8	7110.9	8075.2	8339.4	8410.8	8405.8	8217.9	8552.3	7713.2
62.5°	4349.4	4464.6	5183.5	6789.0	8248.0	8835.4	9050.8	9016.9	8807.8	9341.3	8236.7
65°	3679.4	3779.6	4549.8	6258.0	8146.6	9246.1	9744.6	9762.1	9520.4	10084.0	8650.0
67.5°	2579.8	2653.7	3418.9	5143.4	7457.8	9381.4	10454.6	10453.4	10041.4	10464.7	8467.2
70°	1495.3	1596.8	2020.0	3179.7	5802.2	8766.5	10561.1	10597.4	9829.7	9669.4	7006.9
72.5°	578.6	662.5	1144.7	1689.4	3025.7	6715.1	9084.6	9191.0	8226.7	7459.0	4876.7
75°	172.8	192.9	538.5	899.2	1214.8	3243.6	6150.3	6180.4	5643.1	4652.5	2499.7
77.5°	129.0	142.8	235.4	454.6	425.8	983.1	3182.2	3475.3	2995.6	1661.9	688.8
80°	87.7	103.9	167.8	221.7	157.8	261.7	894.2	981.8	914.2	373.2	172.8
82.5°	38.8	50.1	119.0	111.5	57.6	75.1	275.5	293.1	189.1	112.7	60.1
85°	3.8	5.0	45.1	48.8	21.3	17.5	57.6	57.6	41.3	38.8	25.0
87.5°	0.0	0.0	1.3	2.5	2.5	3.8	5.0	6.3	7.5	10.0	12.5
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-SA3E-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9	2465.9
2.5°	2488.4	2473.4	2492.2	2507.2	2511.0	2483.4	2467.1	2443.3	2438.3	2439.6	2433.3
5°	2522.2	2514.7	2528.5	2512.2	2469.6	2389.5	2320.6	2244.2	2202.9	2179.1	2176.6
7.5°	2584.9	2581.1	2566.1	2492.2	2359.4	2181.6	2010.0	1842.2	1738.3	1700.7	1694.4
10°	2677.5	2670.0	2608.7	2433.3	2150.3	1808.4	1520.4	1279.9	1133.4	1090.8	1038.2
12.5°	2784.0	2769.0	2635.0	2306.8	1834.7	1361.3	1001.9	732.6	606.1	568.6	568.6
15°	2886.7	2854.1	2619.9	2097.7	1446.5	885.4	559.8	423.3	384.5	374.5	374.5
17.5°	2991.9	2929.3	2561.1	1812.2	999.4	523.5	373.2	346.9	341.9	343.1	344.4
20°	3090.8	2993.1	2457.1	1469.0	637.4	365.7	334.4	328.1	325.6	328.1	326.9
22.5°	3198.5	3052.0	2299.3	1094.6	414.5	329.4	318.1	313.1	310.6	314.3	314.3
25°	3305.0	3094.6	2090.2	736.4	329.4	306.8	300.6	295.6	293.1	294.3	294.3
27.5°	3360.1	3078.3	1815.9	469.6	295.6	284.3	278.0	271.8	268.0	266.8	268.0
30°	3397.6	3028.2	1480.3	334.4	268.0	254.2	248.0	243.0	232.9	226.7	229.2
32.5°	3456.5	2978.1	1115.8	280.5	245.5	224.2	214.2	201.6	187.9	181.6	181.6
35°	3526.6	2909.2	782.7	253.0	221.7	199.1	180.3	159.0	142.8	137.8	137.8
37.5°	3619.3	2844.1	521.0	234.2	201.6	177.8	151.5	126.5	109.0	106.5	105.2
40°	3758.3	2789.0	366.9	220.4	184.1	155.3	124.0	97.7	85.2	81.4	81.4
42.5°	3938.7	2732.6	290.5	206.6	169.1	134.0	98.9	77.6	67.6	65.1	63.9
45°	4161.6	2666.3	253.0	194.1	154.0	111.5	78.9	65.1	57.6	55.1	55.1
47.5°	4403.3	2576.1	235.4	177.8	136.5	90.2	66.4	56.4	52.6	51.3	50.1
50°	4641.2	2454.6	220.4	162.8	116.5	73.9	57.6	51.3	48.8	47.6	47.6
52.5°	4849.1	2313.1	201.6	145.3	95.2	63.9	51.3	47.6	45.1	42.6	41.3
55°	5026.9	2159.1	177.8	125.2	77.6	56.4	47.6	43.8	41.3	38.8	37.6
57.5°	5256.1	2071.4	142.8	101.4	63.9	50.1	43.8	40.1	37.6	33.8	33.8
60°	5510.4	2007.5	106.5	80.2	55.1	46.3	40.1	36.3	33.8	30.1	30.1
62.5°	5714.5	1912.3	83.9	65.1	47.6	41.3	36.3	32.6	30.1	26.3	26.3
65°	5792.1	1715.7	68.9	51.3	38.8	36.3	32.6	30.1	26.3	22.5	22.5
67.5°	5441.5	1322.5	57.6	41.3	32.6	31.3	28.8	27.6	22.5	20.0	18.8
70°	*4309.3*	*806.5*	*47.6*	*33.8*	*27.6*	*26.3*	*26.3*	*23.8*	*20.0*	*18.8*	*17.5*
72.5°	2953.0	415.8	38.8	27.6	23.8	23.8	22.5	21.3	18.8	17.5	17.5
75°	1534.1	139.0	30.1	21.3	18.8	20.0	20.0	18.8	17.5	17.5	16.3
77.5°	439.6	62.6	22.5	16.3	15.0	15.0	16.3	16.3	16.3	15.0	15.0
80°	114.0	36.3	16.3	12.5	12.5	12.5	12.5	13.8	15.0	13.8	13.8
82.5°	46.3	20.0	11.3	10.0	10.0	10.0	10.0	11.3	12.5	12.5	12.5
85°	28.8	10.0	8.8	8.8	8.8	7.5	7.5	8.8	8.8	10.0	10.0
87.5°	17.5	7.5	7.5	7.5	7.5	6.3	6.3	6.3	6.3	6.3	6.3
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

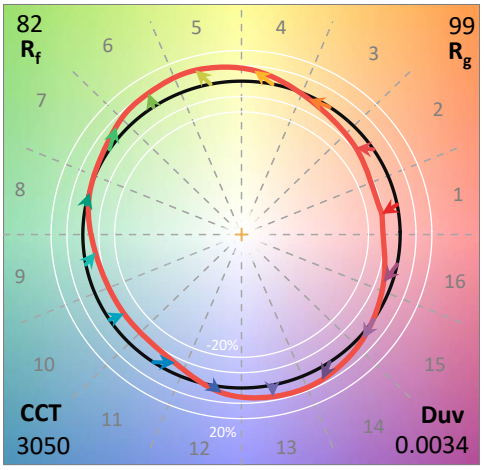
Test Information

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

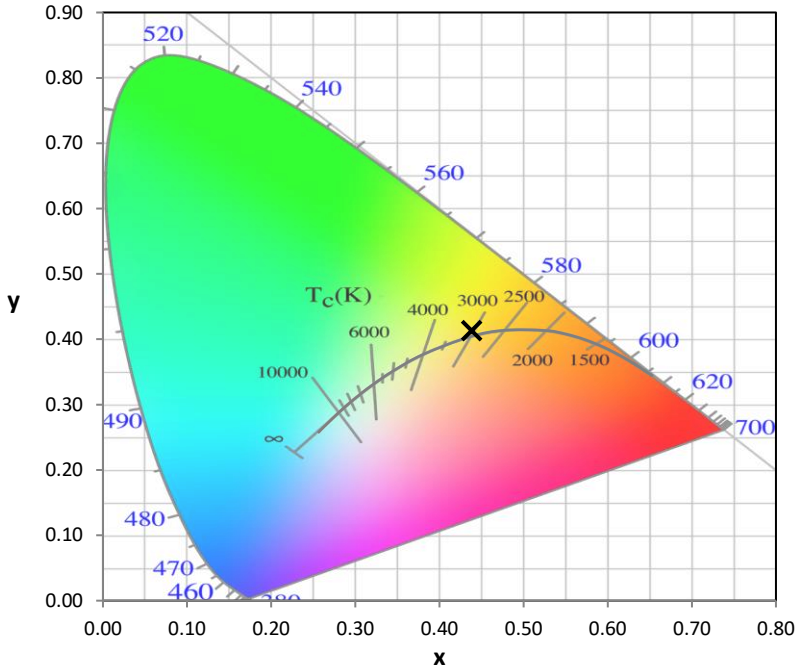
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

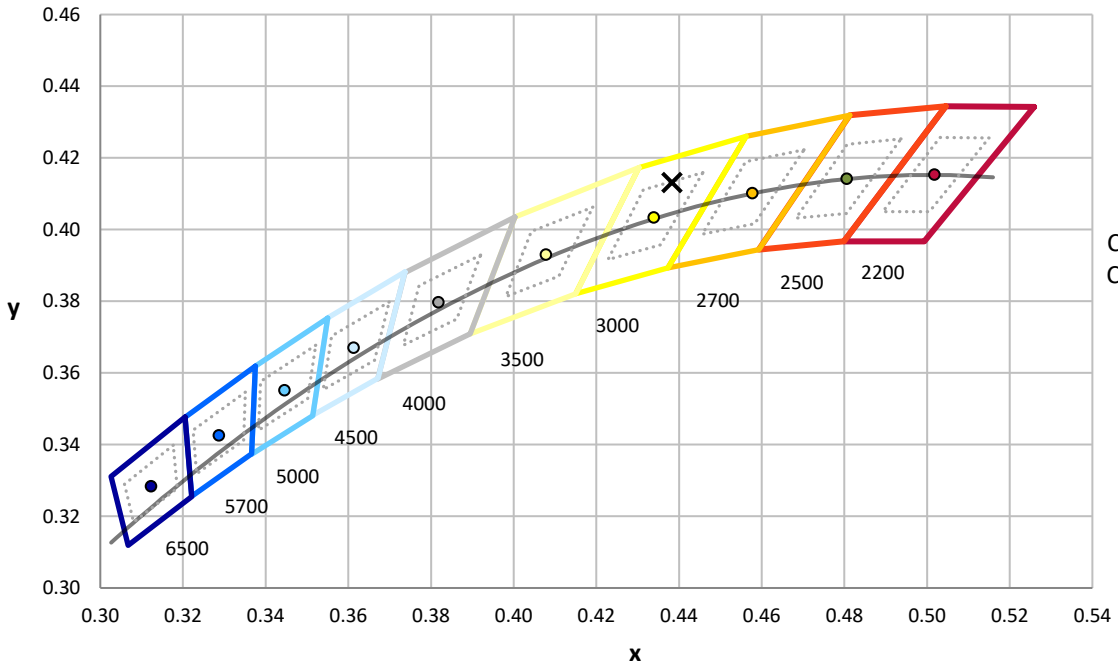
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

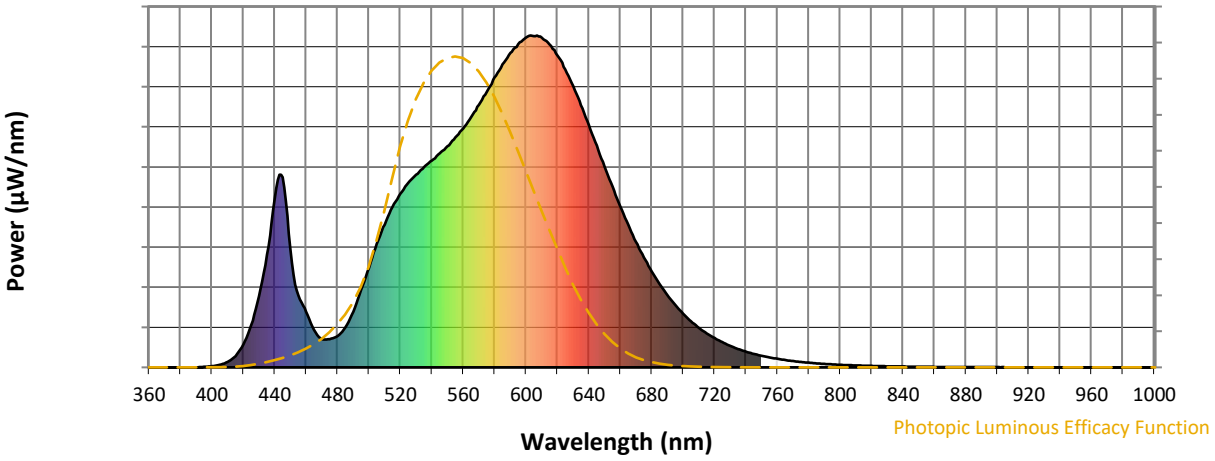


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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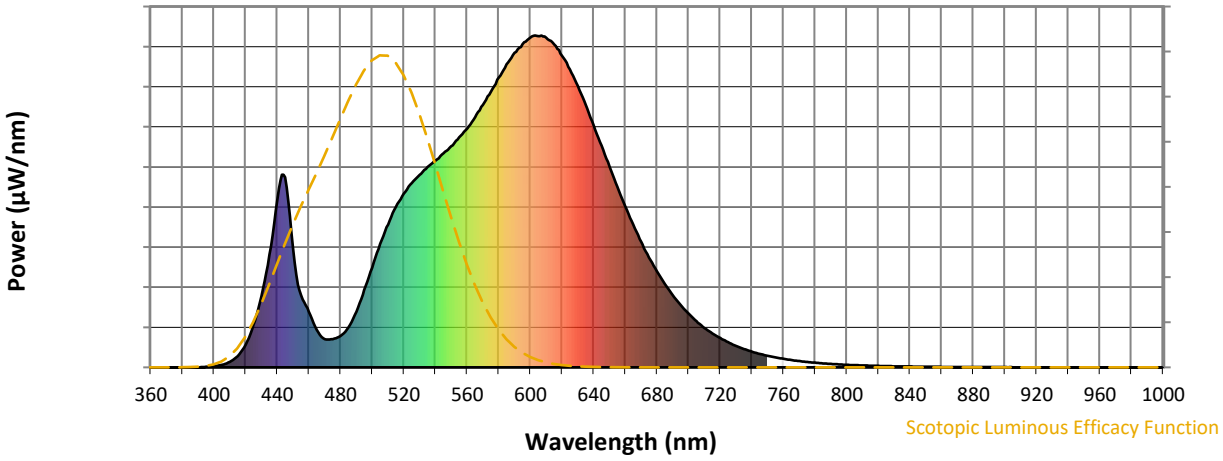
Scotopic Flux vs. Wavelength



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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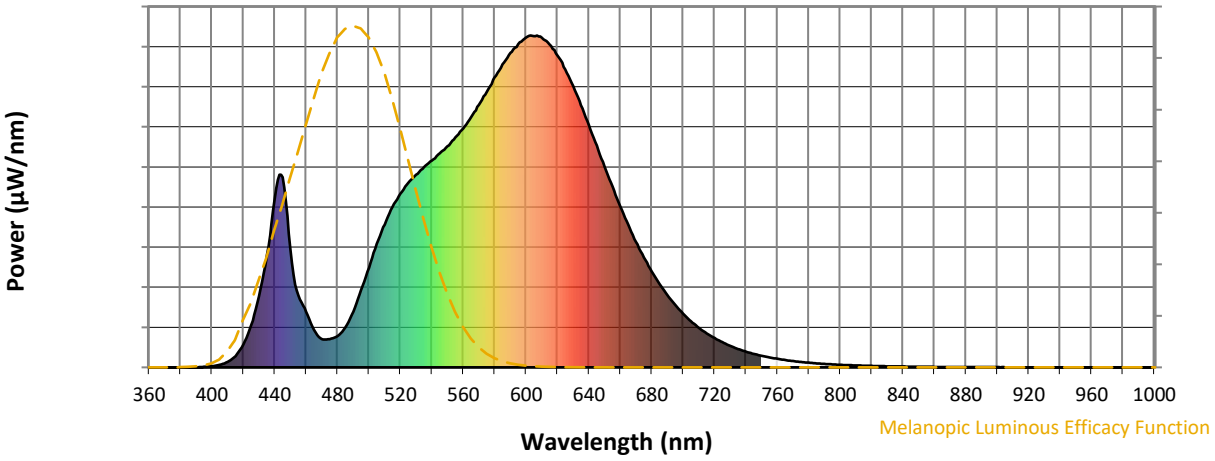
Melanopic Flux vs. Wavelength



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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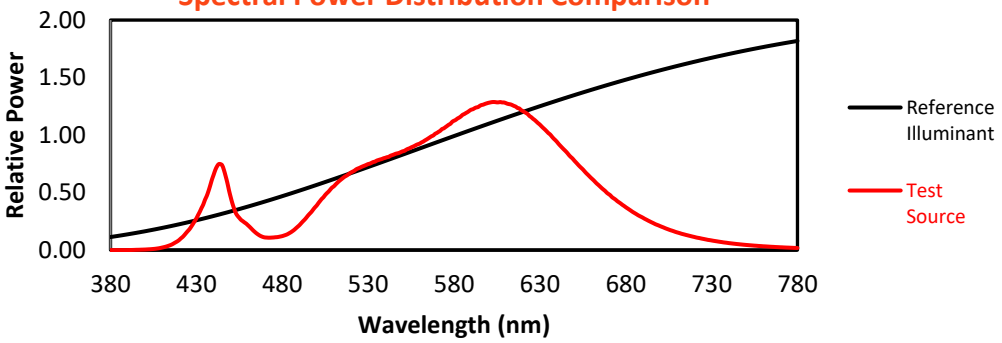
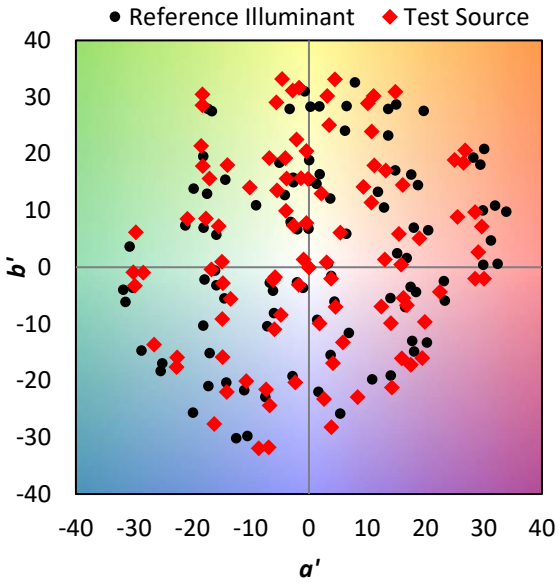
Summary

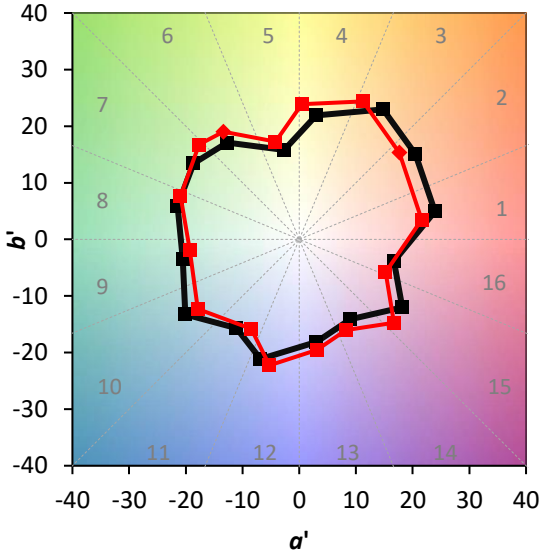
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

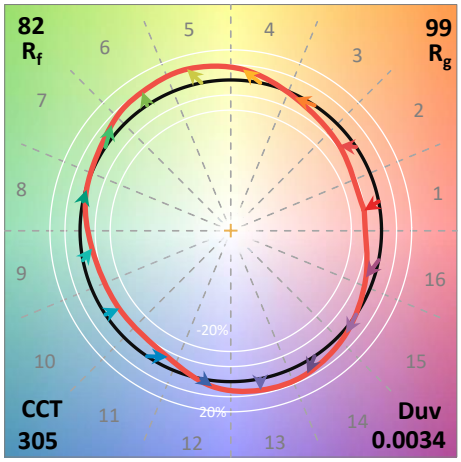
Spectral Power Distribution Comparison

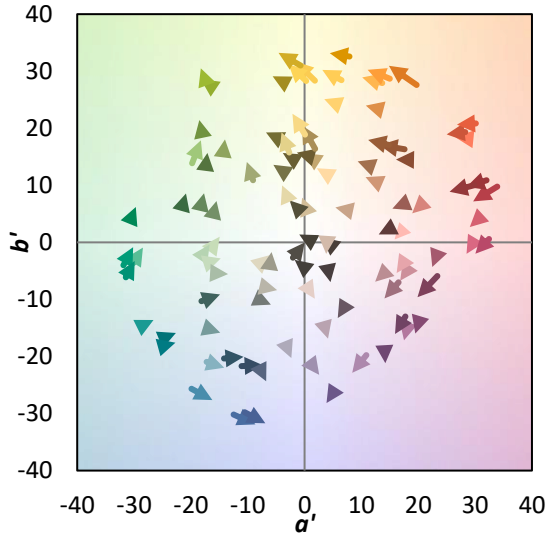


Color Vector Graphics









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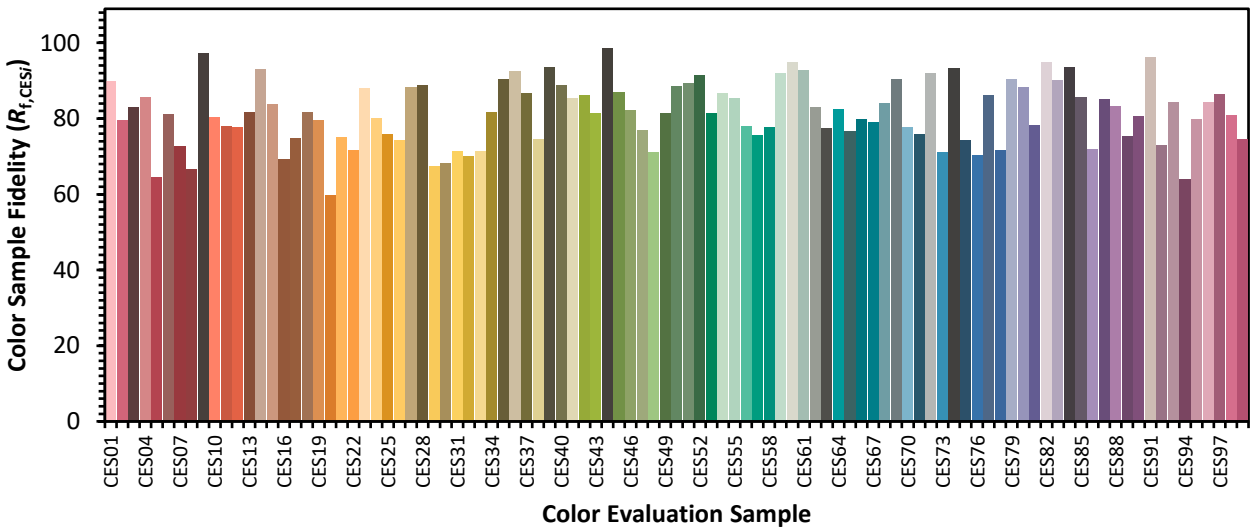
Individual Sample Fidelity Index ($R_{f,i}$)

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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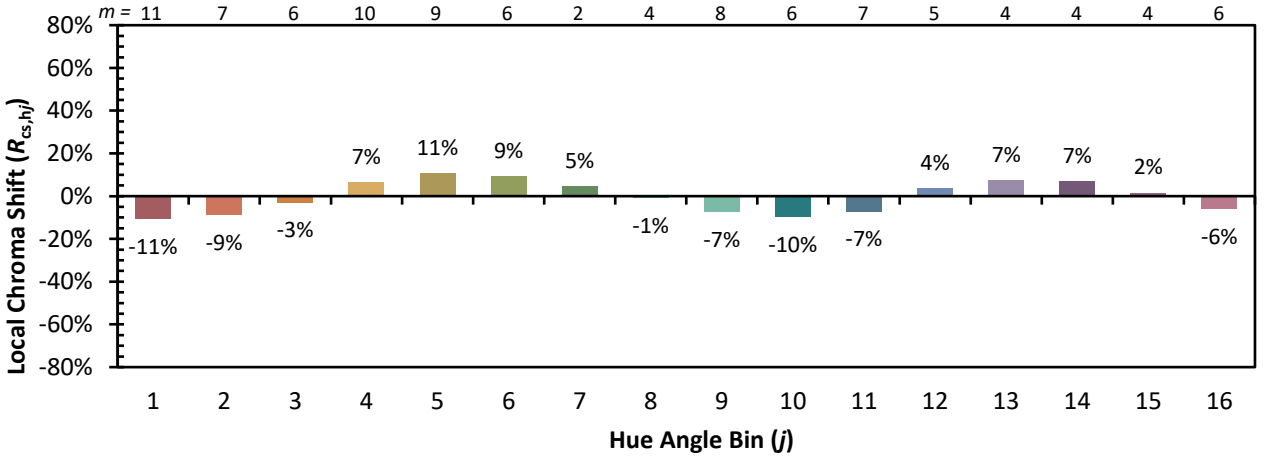
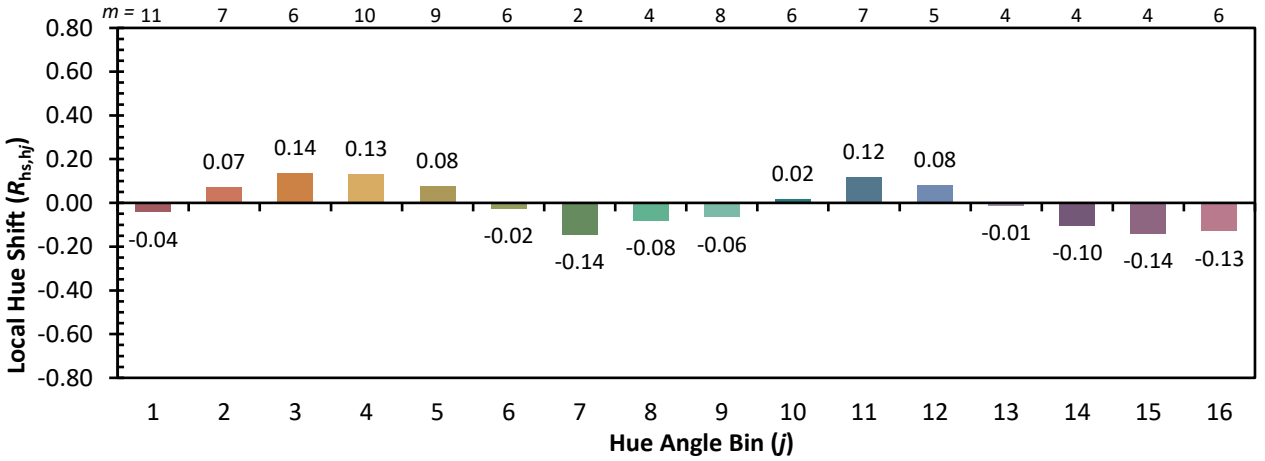
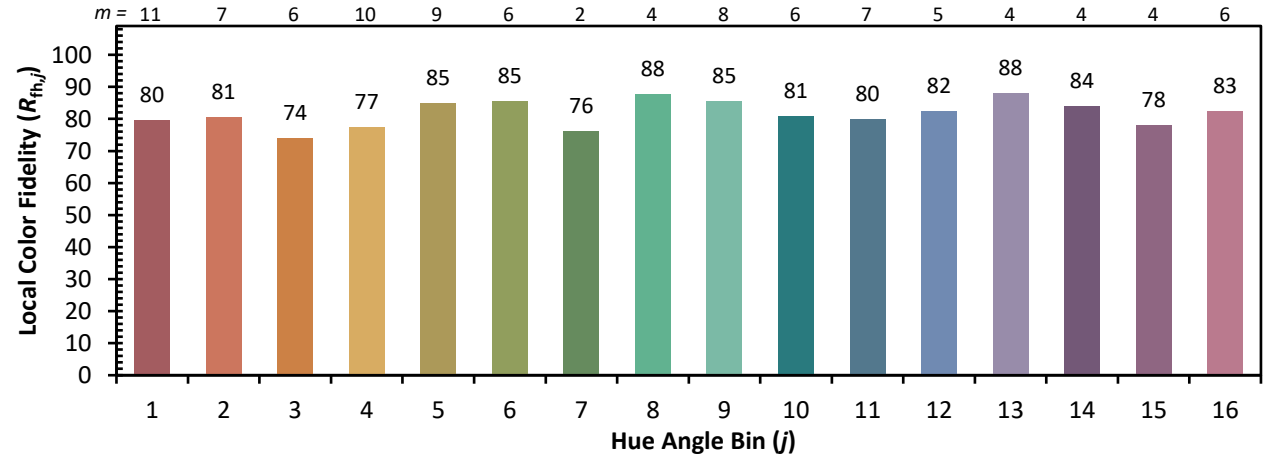
Color Rendition by Hue-Angle Bin







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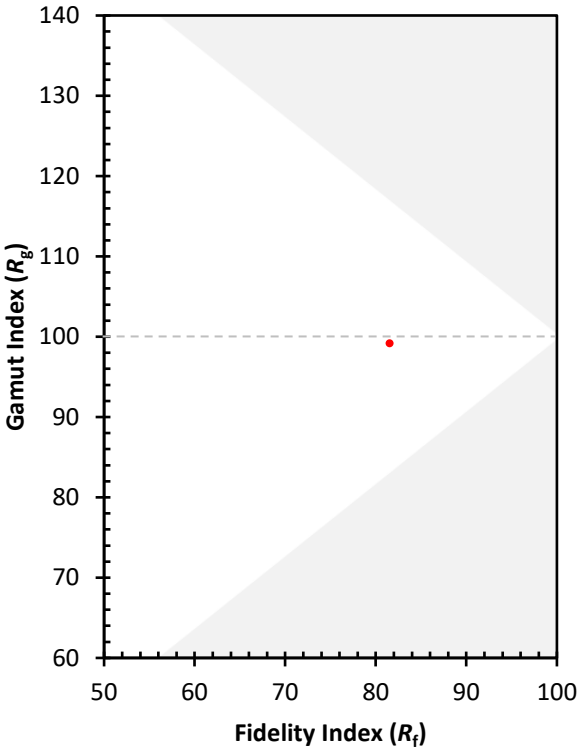
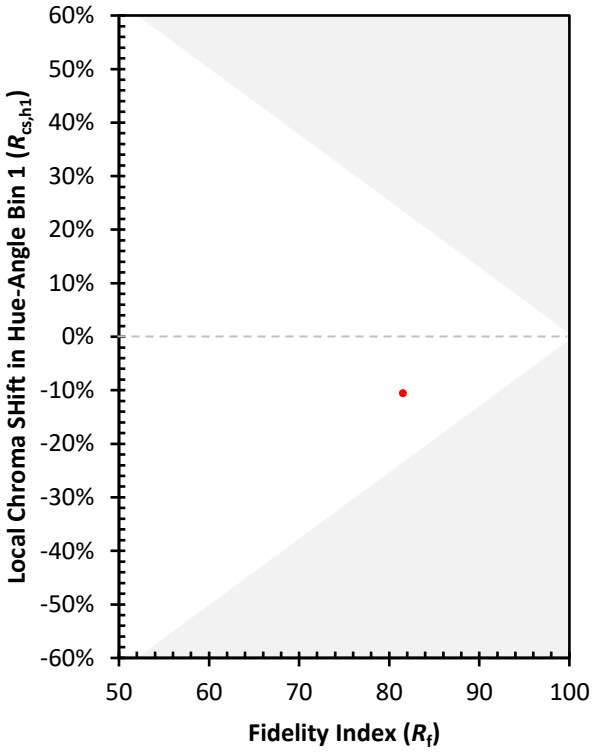
Measure Comparisons





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