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: P637510

Luminaire Tested: GWS-SA4C-830-U-T3R-W-GRSBK

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:	P637510
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-16)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4C-830-U-T3R-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	9671.5 lumens
Efficiency:	N/A
Efficacy:	75.3 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

Input Watts (W):	128.5
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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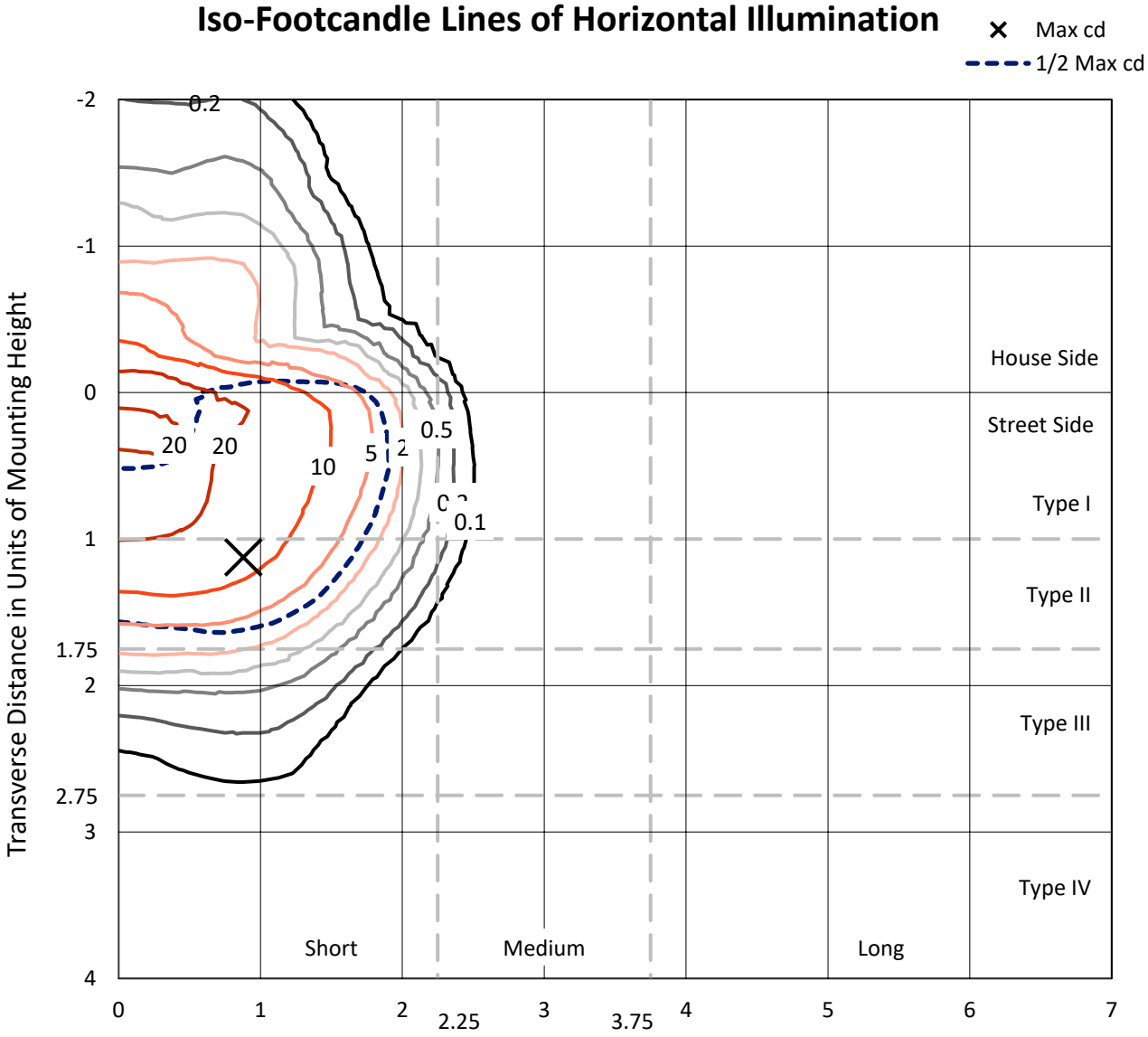
Scaled Data Report

REPORT NUMBER: P637510
CATALOG NUMBER: GWS-SA4C-830-U-T3R-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 24.2 fc
Type II - Short - N/A

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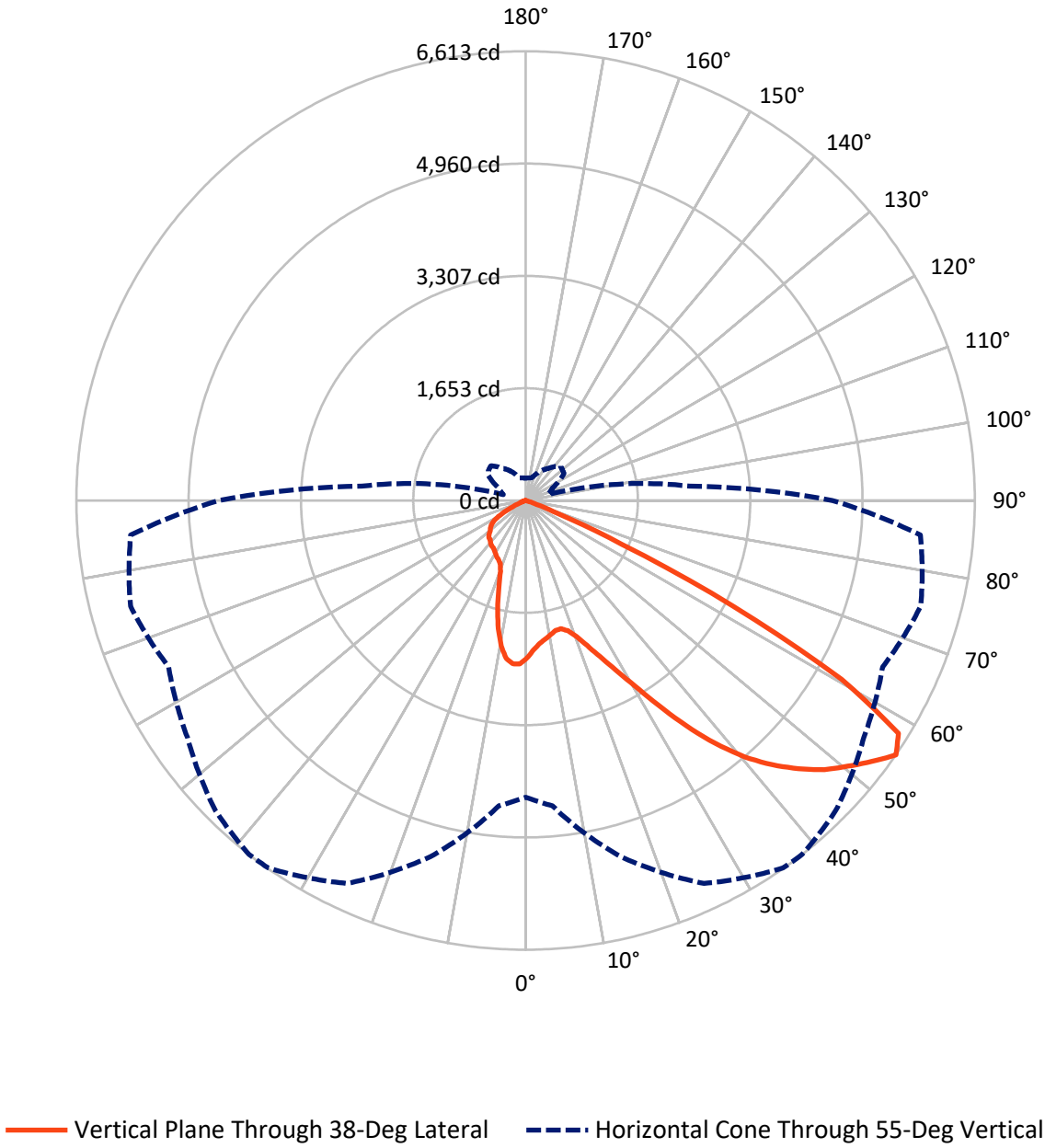
Luminous Intensity Polar Plot



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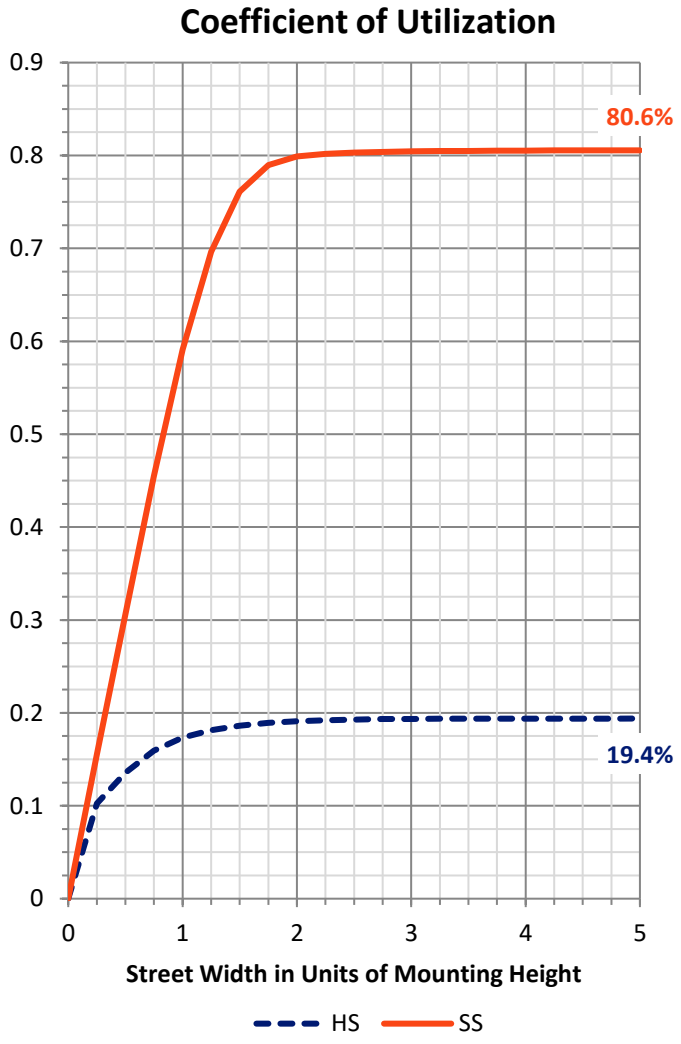
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1884.3	0.0	1884.3
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	7787.2	0.0	7787.2
	% Fixture	80.5	0.0	80.5
Total	Lumens	9671.5	0.0	9671.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.4	2.2
10°-20°	577.3	6.0
20°-30°	990.7	10.2
30°-40°	1643.2	17.0
40°-50°	2415.6	25.0
50°-60°	2822.6	29.2
60°-70°	956.8	9.9
70°-80°	48.9	0.5
80°-90°	1.9	0.0
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°	9671.5	100.0
0°-180°	9671.5	100.0



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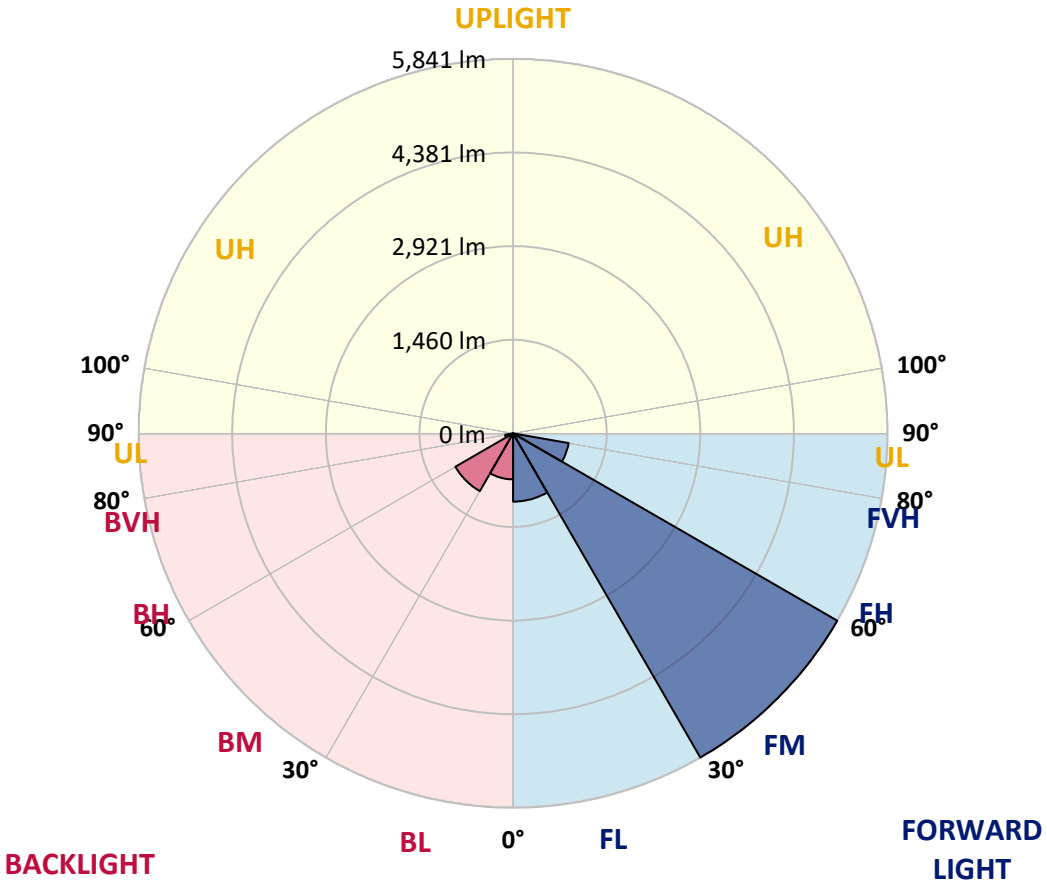
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1064.6	11.0			
FM	(30°-60°)	5841.3	60.4			
FH	(60°-80°)	880.3	9.1			G1/1800
FVH	(80°-90°)	1.0	0.0			G0/10
BL	(0°-30°)	717.9	7.4	B2/1000		
BM	(30°-60°)	1040.1	10.8	B2/2500		
BH	(60°-80°)	125.4	1.3	B1/500		G1/500
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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REPORT NUMBER: P637510
CATALOG NUMBER: GWS-SA4C-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3
2.5°	2160.1	2155.7	2164.5	2182.2	2198.8	2204.3	2220.9	2244.1	2258.5	2292.8	2320.4
5°	2062.8	2060.6	2069.5	2084.9	2107.0	2114.8	2140.2	2178.9	2217.6	2277.3	2335.9
7.5°	1974.4	1973.3	1986.5	2020.8	2052.9	2062.8	2093.8	2141.3	2193.3	2285.0	2371.3
10°	1858.3	1859.4	1884.8	1933.5	1992.1	2012.0	2061.7	2130.3	2197.7	2316.0	2435.4
12.5°	1820.7	1822.9	1836.2	1873.8	1937.9	1963.3	2033.0	2136.9	2223.1	2360.2	2518.3
15°	1912.5	1912.5	1901.4	1905.8	1934.6	1957.8	2030.8	2159.0	2266.2	2413.3	2600.1
17.5°	2090.5	2083.8	2056.2	2018.6	2008.7	2016.4	2075.0	2206.5	2327.0	2475.2	2693.0
20°	2331.5	2333.7	2279.5	2201.0	2138.0	2136.9	2172.3	2290.6	2414.4	2549.2	2793.6
22.5°	2623.3	2614.5	2542.6	2435.4	2325.9	2317.1	2331.5	2418.8	2540.4	2666.4	2917.4
25°	2961.6	2957.2	2855.5	2711.7	2566.9	2545.9	2545.9	2632.2	2720.6	2833.3	3065.5
27.5°	3315.3	3315.3	3217.0	3051.1	2858.8	2821.2	2815.7	2917.4	2976.0	2998.1	3190.4
30°	3679.0	3674.6	3577.3	3407.1	3201.5	3162.8	3147.3	3222.5	3264.5	3198.2	3346.3
32.5°	4048.3	4056.0	3957.6	3799.5	3616.0	3590.6	3543.1	3543.1	3577.3	3484.5	3591.7
35°	4445.1	4442.9	4365.5	4258.3	4101.3	4072.6	3994.1	3871.4	3923.4	3882.5	3931.1
37.5°	4795.6	4812.2	4774.6	4695.0	4567.8	4539.1	4409.8	4187.6	4227.4	4291.5	4334.6
40°	5151.5	5164.8	5202.4	5177.0	5016.7	4963.6	4733.7	4368.9	4413.1	4633.1	4756.9
42.5°	5500.9	5507.5	5583.8	5625.8	5411.3	5318.5	4979.1	4479.4	4525.8	4900.6	5117.3
45°	5723.1	5737.4	5863.5	5991.7	5759.6	5632.4	5192.4	4620.9	4640.8	5086.3	5383.7
47.5°	5714.2	5747.4	5984.0	6217.2	6059.1	5922.1	5448.9	4847.5	4814.4	5261.0	5559.5
50°	5536.3	5576.0	5915.4	6285.8	6274.7	6147.6	5734.1	5175.9	5071.9	5415.8	5581.6
52.5°	5167.0	5282.0	5794.9	6294.6	6448.3	6384.2	6086.8	5618.1	5420.2	5638.0	5617.0
55°	4368.9	4510.4	5429.0	6219.4	6605.3	6613.0	6457.1	6079.0	5798.2	6020.5	5834.7
57.5°	3316.4	3429.2	4178.7	5536.3	6345.5	6472.6	6600.8	6322.2	6031.5	6281.3	5885.6
60°	1998.7	2129.2	2616.7	4062.6	5125.0	5341.7	5844.7	5790.5	5440.1	5547.3	4826.5
62.5°	810.3	878.9	1208.3	2238.6	3225.8	3428.1	3910.1	3991.9	3905.7	3796.2	2927.3
65°	296.3	323.9	484.2	925.3	1483.6	1557.6	1811.9	1956.7	2076.1	1767.7	1088.9
67.5°	183.5	201.2	315.1	475.4	539.5	501.9	510.7	609.1	581.5	359.3	194.6
70°	136.0	150.3	246.5	329.4	217.8	168.0	113.9	121.6	109.4	96.2	95.1
72.5°	94.0	107.2	184.6	194.6	84.0	59.7	42.0	58.6	66.3	65.2	67.4
75°	61.9	71.9	116.1	76.3	21.0	16.6	14.4	31.0	39.8	39.8	40.9
77.5°	36.5	42.0	40.9	15.5	4.4	4.4	3.3	5.5	8.8	9.9	12.2
80°	4.4	3.3	2.2	2.2	2.2	2.2	2.2	2.2	3.3	3.3	3.3
82.5°	1.1	1.1	1.1	2.2	2.2	2.2	2.2	2.2	2.2	3.3	3.3
85°	0.0	0.0	1.1	1.1	2.2	2.2	2.2	2.2	2.2	3.3	3.3
87.5°	0.0	0.0	1.1	1.1	2.2	2.2	2.2	2.2	2.2	3.3	3.3
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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REPORT NUMBER: P637510
CATALOG NUMBER: GWS-SA4C-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3	2319.3
2.5°	2341.4	2333.7	2365.7	2388.9	2407.7	2416.6	2404.4	2403.3	2403.3	2379.0	2372.4
5°	2369.0	2372.4	2417.7	2437.6	2440.9	2429.8	2402.2	2383.4	2372.4	2346.9	2332.6
7.5°	2422.1	2433.2	2476.3	2473.0	2443.1	2392.3	2319.3	2262.9	2226.4	2186.6	2162.3
10°	2498.4	2519.4	2545.9	2499.5	2404.4	2275.1	2124.7	2017.5	1953.4	1908.1	1880.4
12.5°	2591.2	2612.3	2603.4	2494.0	2296.1	2065.0	1871.6	1716.8	1642.7	1601.8	1573.1
15°	2685.2	2698.5	2641.0	2427.6	2104.8	1794.2	1578.6	1425.0	1334.3	1301.2	1276.8
17.5°	2781.4	2778.1	2647.6	2297.2	1849.5	1489.1	1276.8	1171.8	1146.4	1140.9	1138.6
20°	2882.0	2852.1	2621.1	2110.4	1542.1	1187.3	1066.8	1073.4	1119.9	1142.0	1146.4
22.5°	2997.0	2921.8	2554.8	1857.2	1228.2	989.4	1001.6	1066.8	1129.8	1159.6	1164.1
25°	3119.7	2985.9	2444.2	1532.2	968.4	909.8	981.7	1056.8	1124.3	1160.8	1165.2
27.5°	3200.4	3001.4	2262.9	1205.0	831.3	878.9	955.1	1027.0	1096.6	1136.4	1142.0
30°	3287.7	2994.7	2016.4	928.6	784.9	852.3	918.7	983.9	1048.0	1092.2	1096.6
32.5°	3415.9	2990.3	1715.7	753.9	766.1	831.3	880.0	934.1	978.4	1003.8	1000.5
35°	3584.0	2984.8	1365.3	679.9	755.0	814.7	853.4	878.9	830.2	814.7	818.1
37.5°	3799.5	2998.1	1070.1	648.9	751.7	810.3	843.5	770.5	695.3	666.6	662.2
40°	4038.3	3032.3	815.8	636.8	762.8	821.4	805.9	685.4	592.5	536.2	524.0
42.5°	4278.2	3069.9	645.6	632.3	781.6	852.3	744.0	623.5	484.2	452.1	447.7
45°	4456.2	3063.3	558.3	624.6	798.2	870.0	727.4	535.1	432.2	417.9	419.0
47.5°	4545.7	2990.3	510.7	606.9	804.8	852.3	686.5	498.6	396.9	412.3	425.6
50°	4498.2	2801.3	466.5	572.6	790.4	829.1	621.3	470.9	379.2	443.3	473.1
52.5°	4440.7	2569.1	417.9	519.6	756.1	797.1	595.9	463.2	368.1	427.8	449.9
55°	*4517.0*	*2422.1*	*338.3*	*437.8*	*688.7*	*721.9*	*576.0*	*462.1*	*342.7*	*332.7*	*329.4*
57.5°	4409.8	2129.2	242.1	315.1	528.4	571.5	561.6	454.4	304.0	302.9	307.3
60°	3408.2	1298.9	165.8	200.1	323.9	364.8	509.6	434.5	262.0	241.0	242.1
62.5°	1936.8	552.7	113.9	123.8	165.8	196.8	389.1	394.7	242.1	229.9	242.1
65°	674.3	197.9	88.4	82.9	91.8	105.0	223.3	305.1	220.0	199.0	201.2
67.5°	139.3	98.4	78.5	68.5	68.5	68.5	113.9	190.1	181.3	158.1	160.3
70°	88.4	84.0	68.5	58.6	56.4	52.0	65.2	105.0	124.9	115.0	116.1
72.5°	65.2	64.1	54.2	47.5	42.0	37.6	40.9	52.0	64.1	66.3	67.4
75°	39.8	40.9	35.4	29.8	26.5	23.2	24.3	24.3	24.3	22.1	24.3
77.5°	12.2	13.3	11.1	8.8	7.7	7.7	7.7	6.6	5.5	3.3	3.3
80°	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.1	1.1	0.0	0.0
82.5°	3.3	3.3	3.3	3.3	2.2	2.2	1.1	1.1	0.0	0.0	0.0
85°	3.3	3.3	3.3	3.3	2.2	2.2	1.1	1.1	0.0	0.0	0.0
87.5°	3.3	3.3	3.3	3.3	2.2	2.2	1.1	1.1	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

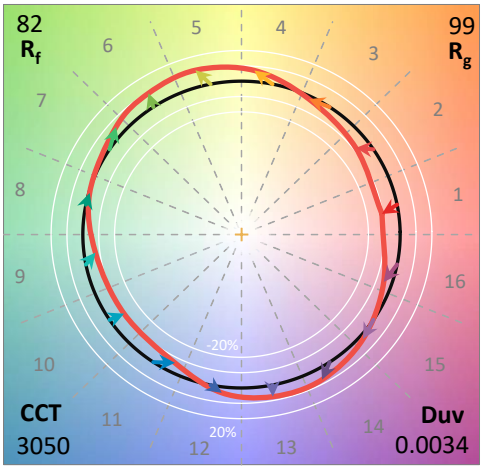
Test Information

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

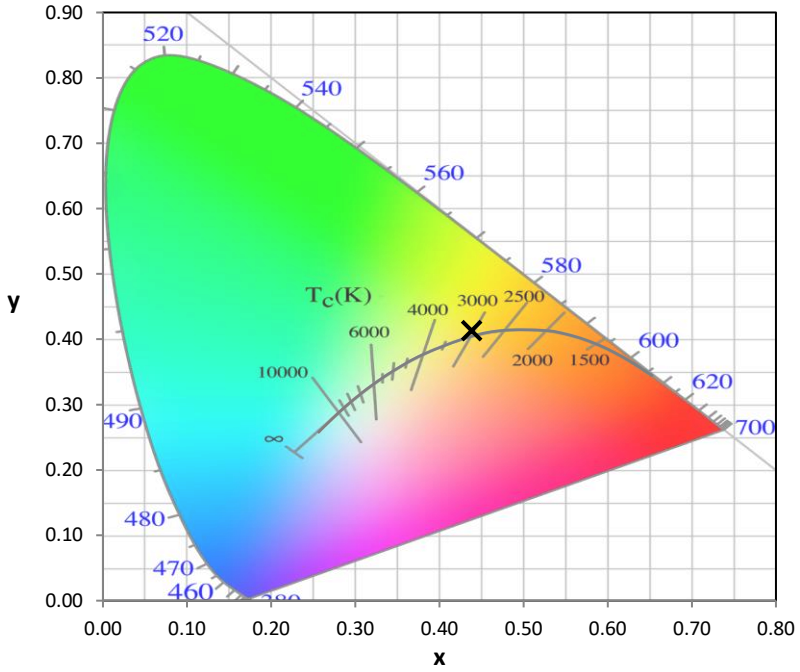
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

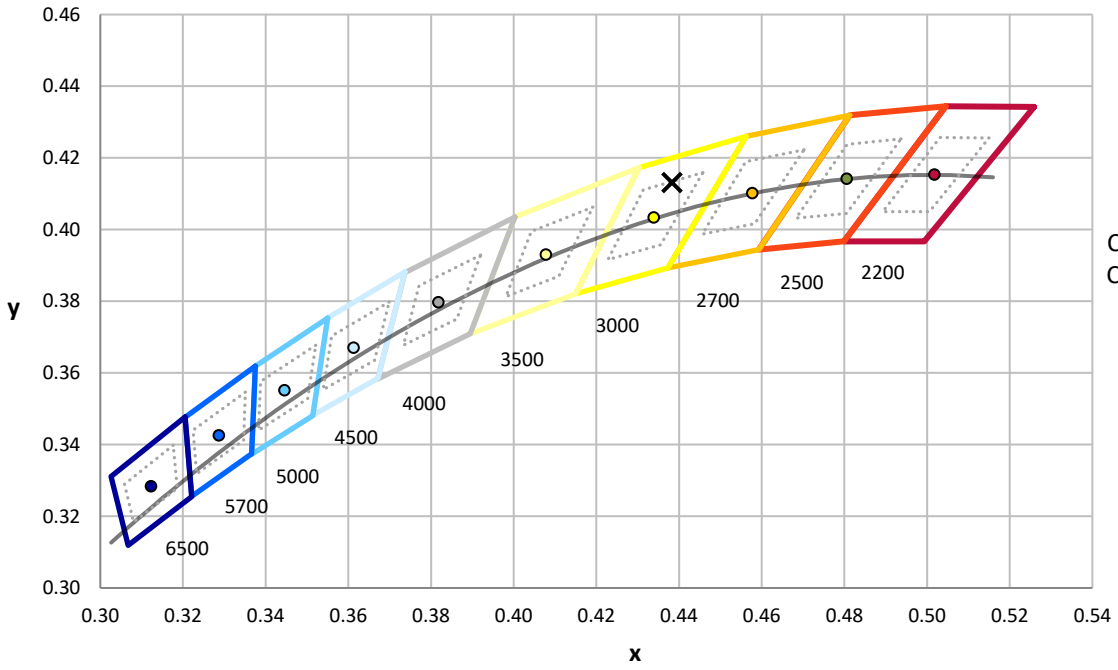
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

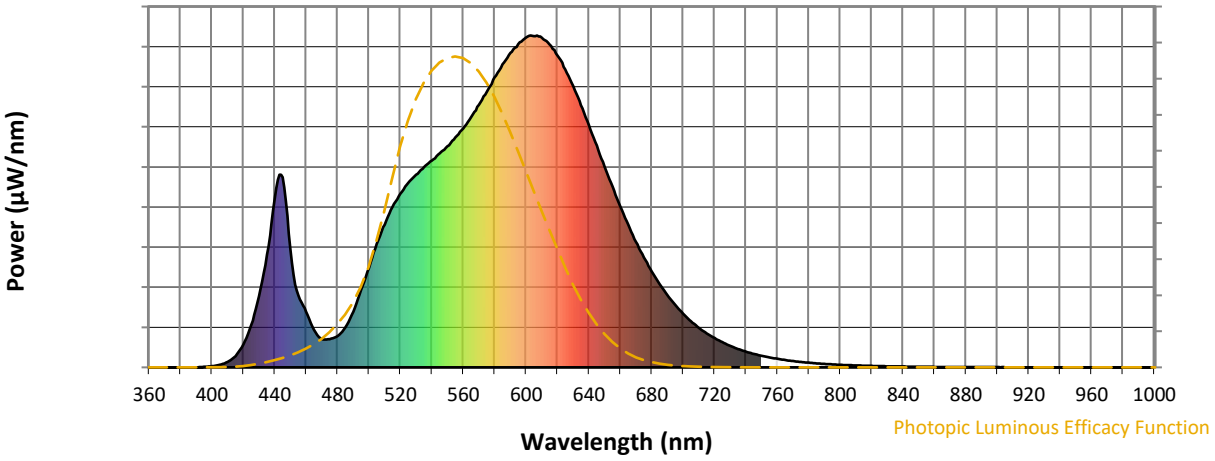


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

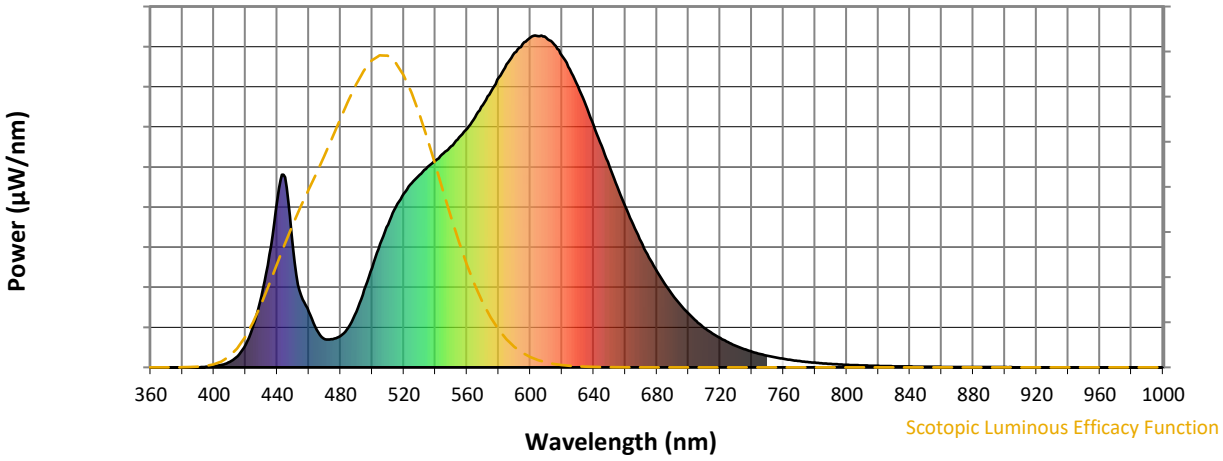


Photopic Lumens: NR

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			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength

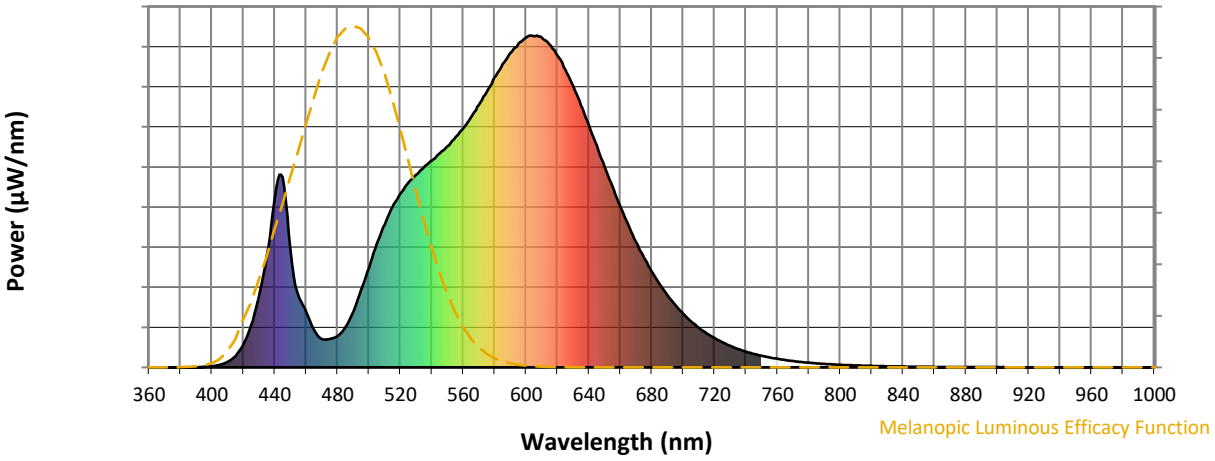


Scotopic Lumens: NR **S/P: 1.27**

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			

REPORT NUMBER: SP1-2408-195-9

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			

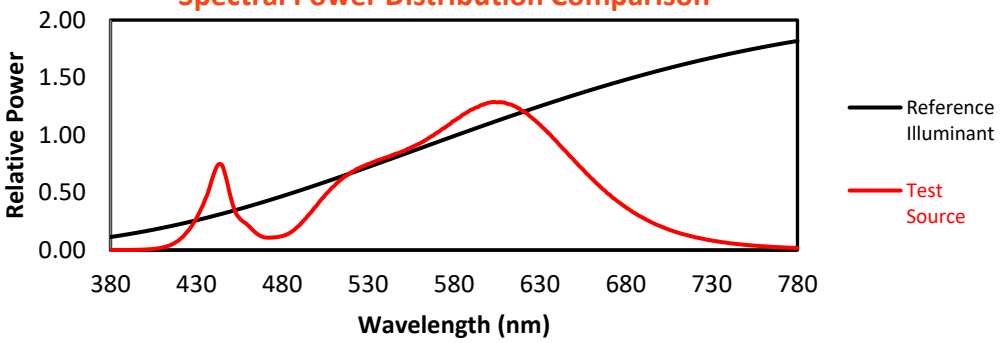
REPORT NUMBER: SP1-2408-195-9

TM-30-18

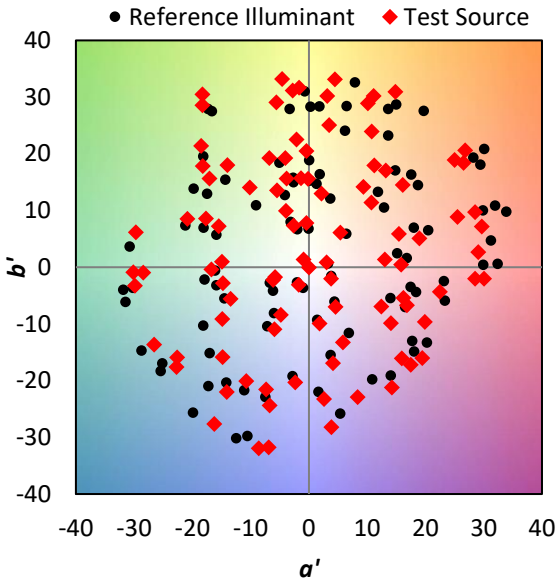
Summary

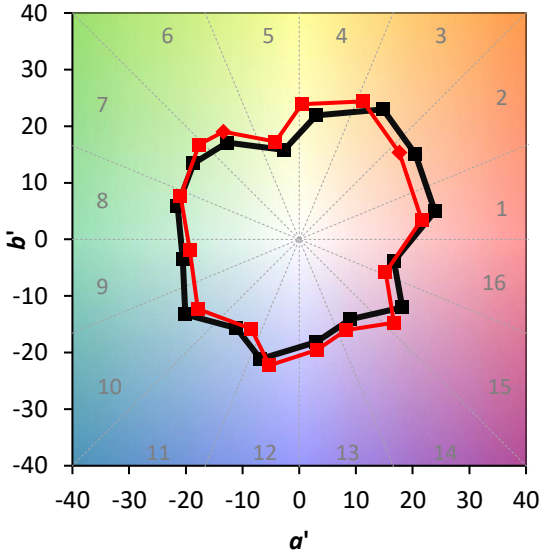
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

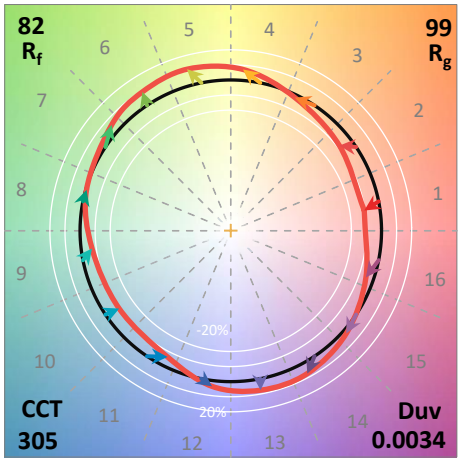
Spectral Power Distribution Comparison

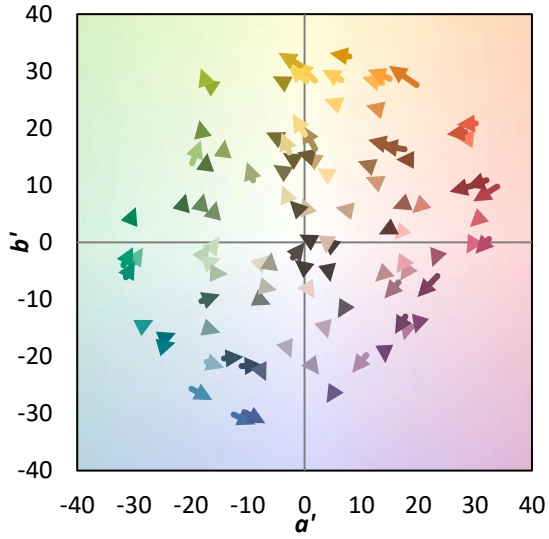


Color Vector Graphics







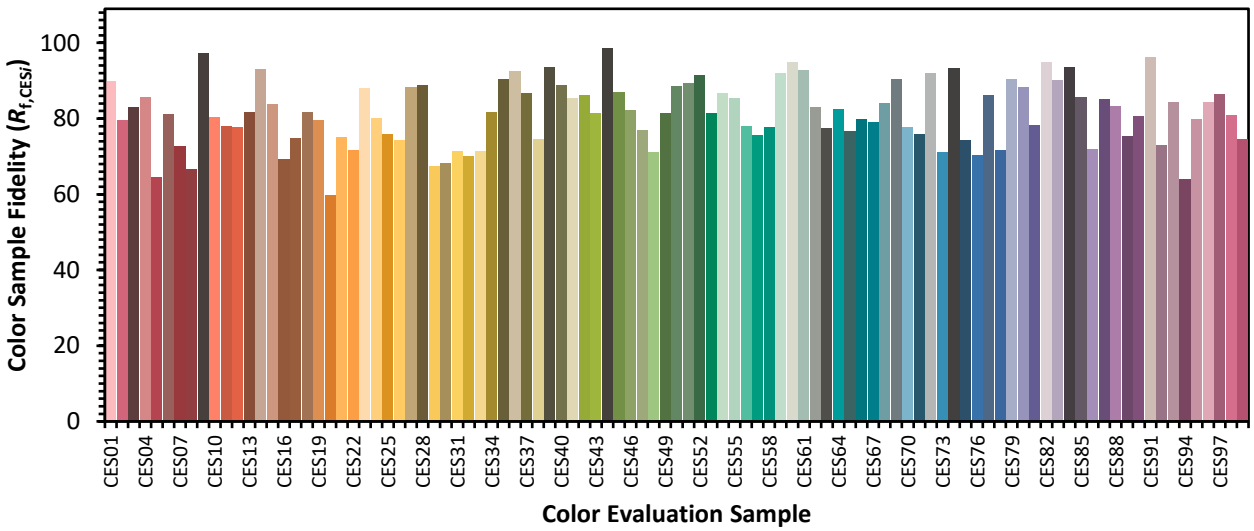


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

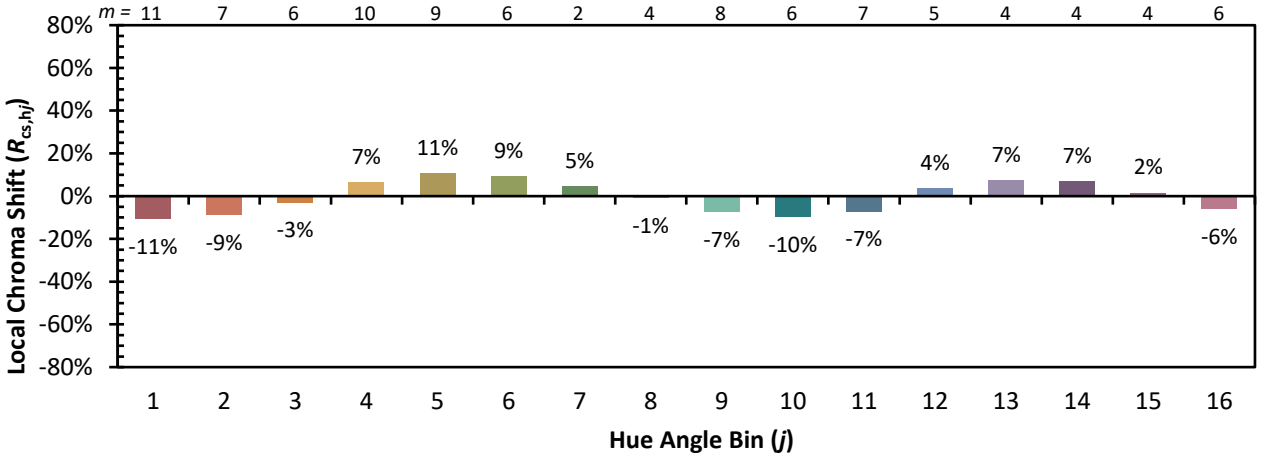
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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	

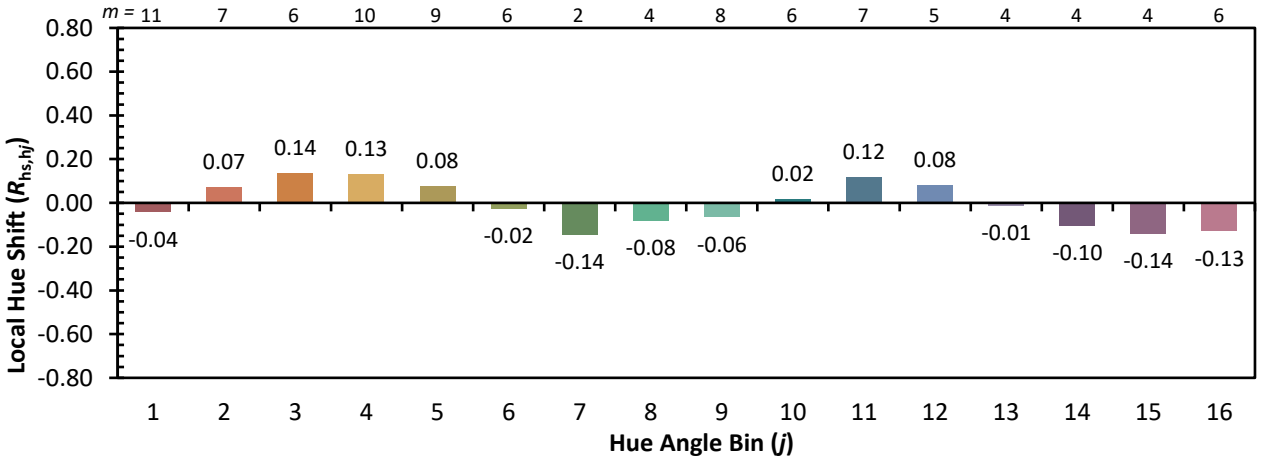


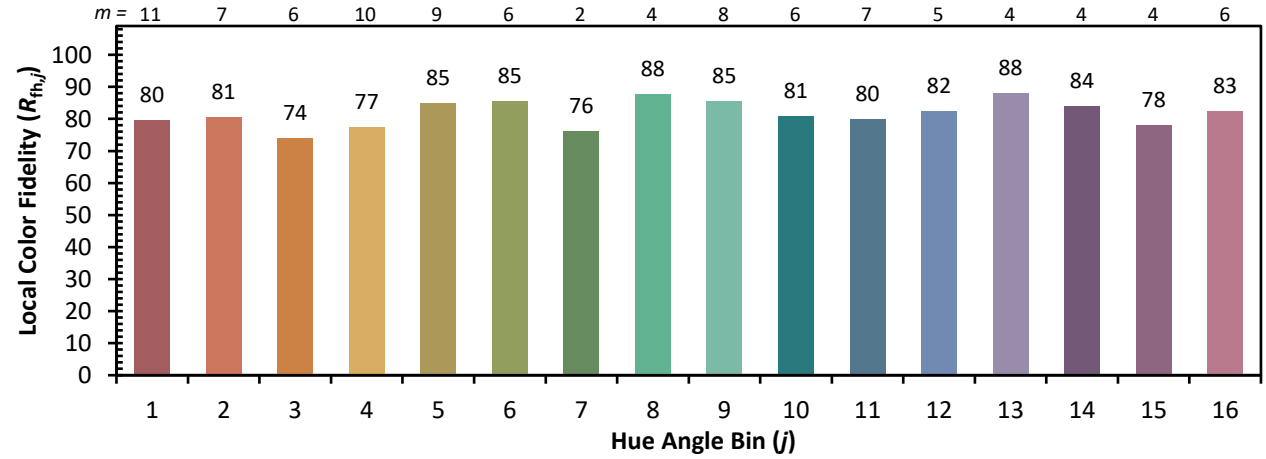
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



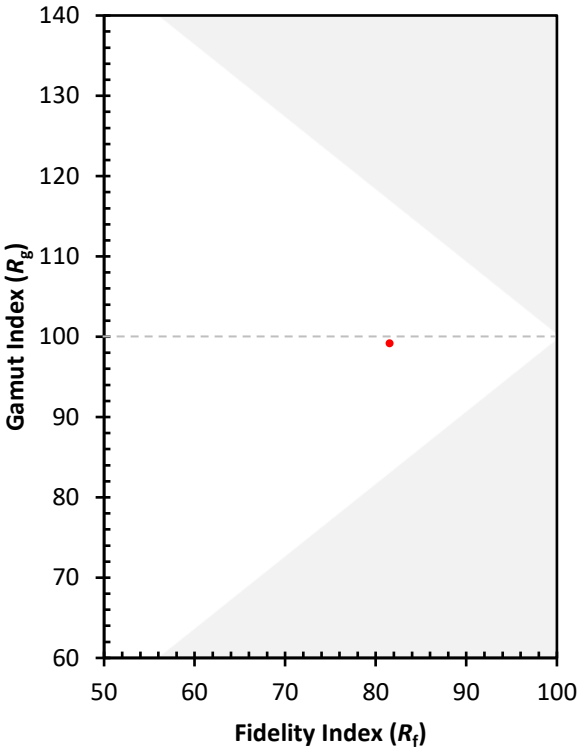


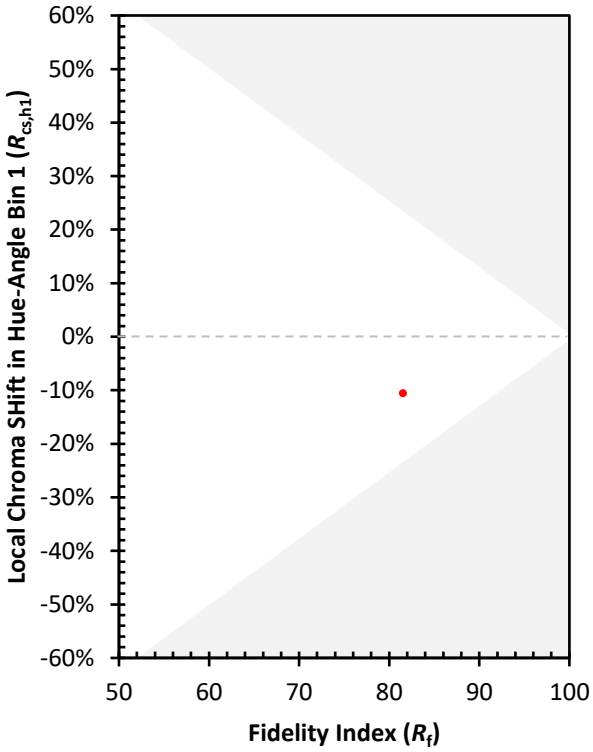


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





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