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: P633537

Luminaire Tested: GWS-SA2E-830-U-T1-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:	P633537
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-10)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA2E-830-U-T1-W
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11569.8 lumens
Efficiency:	N/A
Efficacy:	106.9 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type I - Medium
BUG Rating:	B3 - U0 - G3

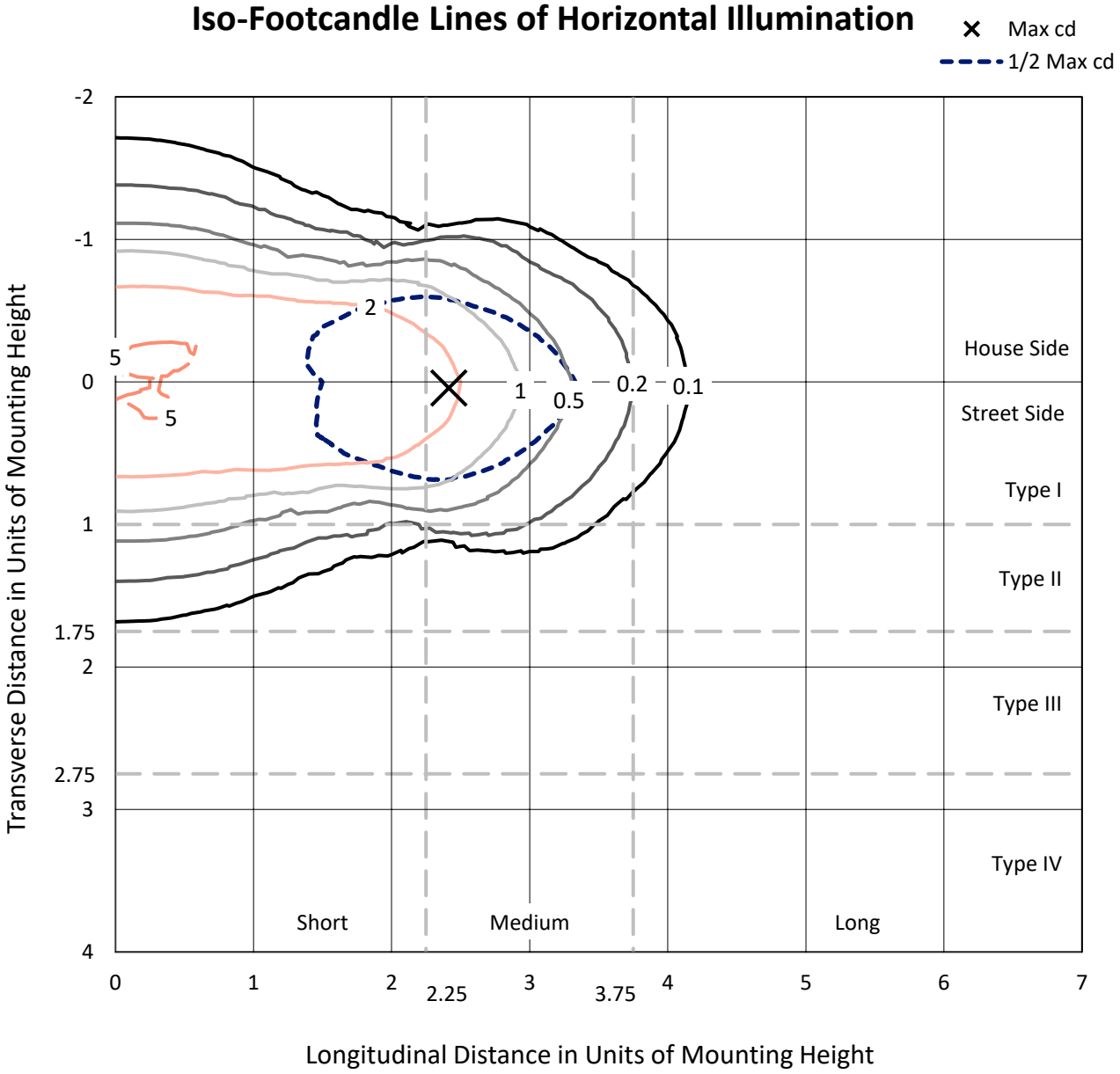
Input Watts (W):	108.2
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P633537
CATALOG NUMBER: GWS-SA2E-830-U-T1-W

Iso-Footcandle Lines of Horizontal Illumination



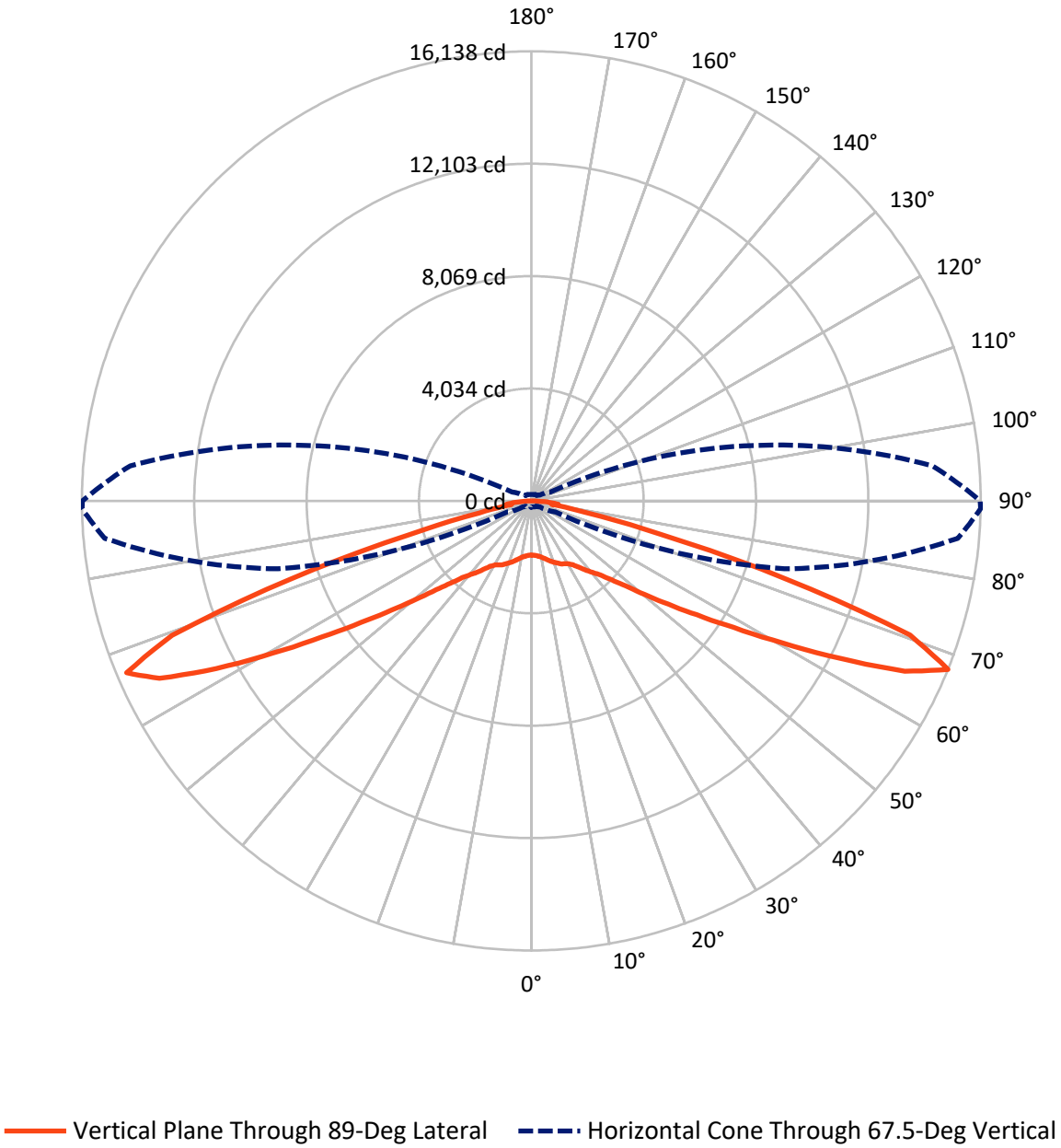
Based on 20 foot mounting height. Maximum calculated value = 5.3 fc
Type I - Medium - N/A

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P633537
CATALOG NUMBER: GWS-SA2E-830-U-T1-W

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

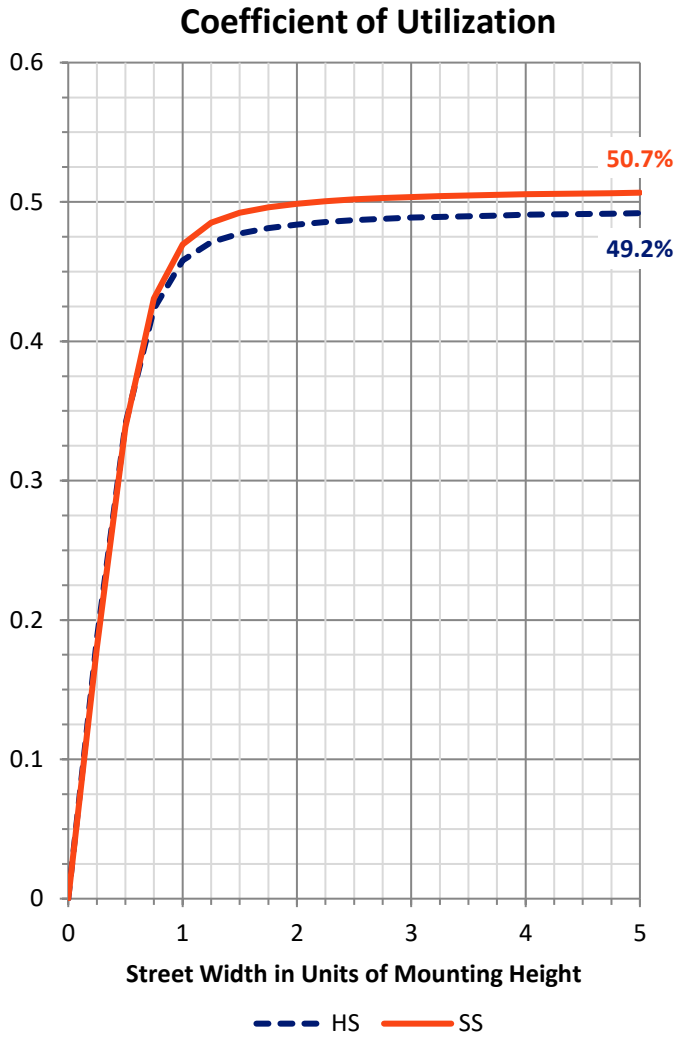
REPORT NUMBER: P633537
CATALOG NUMBER: GWS-SA2E-830-U-T1-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5734.2	0.0	5734.2
	% Fixture	49.6	0.0	49.6
Street Side	Lumens	5835.6	0.0	5835.6
	% Fixture	50.4	0.0	50.4
Total	Lumens	11569.8	0.0	11569.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.8	1.7
10°-20°	634.3	5.5
20°-30°	1072.2	9.3
30°-40°	1471.4	12.7
40°-50°	1876.4	16.2
50°-60°	2354.2	20.3
60°-70°	2839.4	24.5
70°-80°	1027.2	8.9
80°-90°	99.9	0.9
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°	11569.8	100.0
0°-180°	11569.8	100.0



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

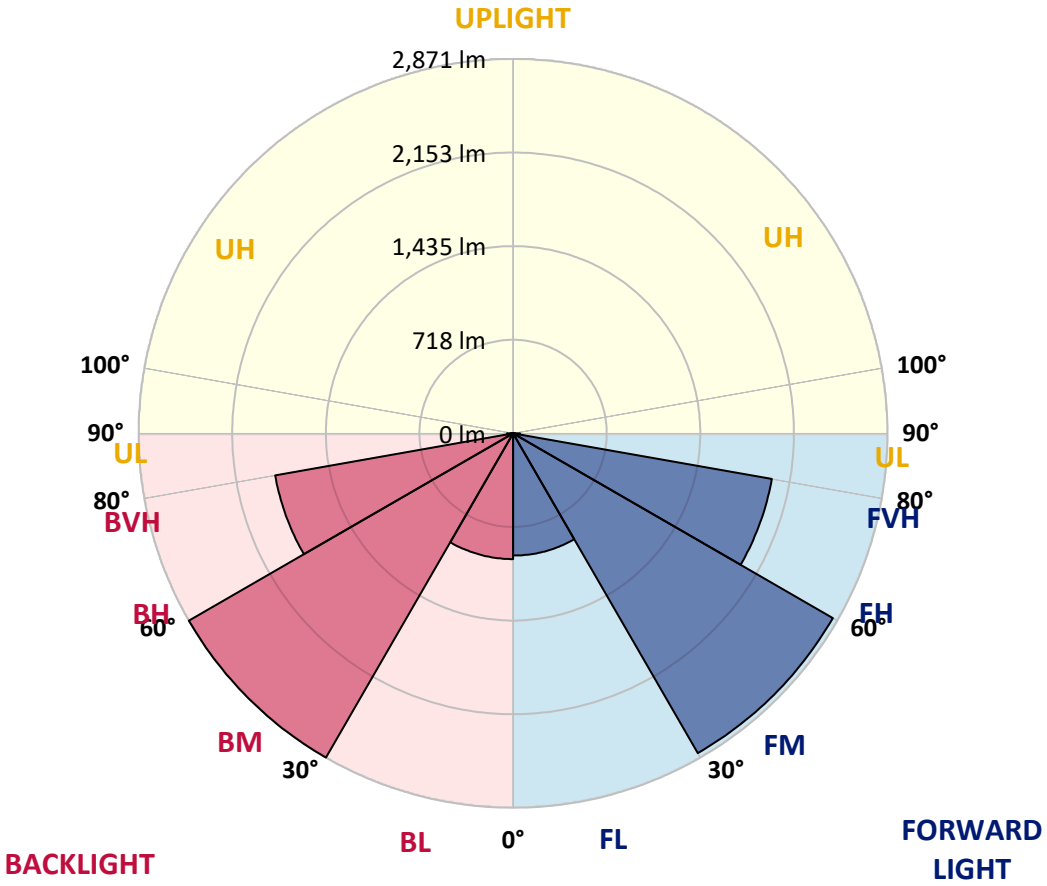
Scaled Data Report

REPORT NUMBER: P633537
CATALOG NUMBER: GWS-SA2E-830-U-T1-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	937.1	8.1			
FM	(30°-60°)	2831.4	24.5			
FH	(60°-80°)	2014.5	17.4			G2/5000
FVH	(80°-90°)	52.7	0.5			G1/100
BL	(0°-30°)	964.2	8.3	B2/1000		
BM	(30°-60°)	2870.7	24.8	B3/5000		
BH	(60°-80°)	1852.1	16.0	B3/2500		G3/2500
BVH	(80°-90°)	47.2	0.4			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 I Medium



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P633537
CATALOG NUMBER: GWS-SA2E-830-U-T1-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	89°
0°	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9	*1941.9*
2.5°	1947.7	1946.1	1941.9	1954.4	1951.9	1952.7	1957.7	1954.4	1948.5	1938.6	*1952.7*
5°	2002.6	2001.7	1992.6	2000.1	1991.8	1985.9	1985.1	1976.8	1970.1	1959.3	*1974.3*
7.5°	2055.7	2054.9	2047.4	2060.7	2054.1	2047.4	2039.9	2023.3	2007.5	1991.8	*2008.4*
10°	2096.5	2095.6	2094.0	2113.1	2114.7	2117.2	2113.9	2085.6	2058.2	2039.1	*2055.7*
12.5°	2119.7	2122.2	2126.4	2161.3	2178.7	2195.3	2199.5	2176.2	2130.5	2103.1	*2123.0*
15°	2103.9	2108.9	2129.7	2192.8	2241.0	2278.4	2294.2	2275.1	2216.1	2170.4	*2192.8*
17.5°	2028.3	2032.5	2073.2	2169.6	2275.9	2362.4	2388.1	2376.5	2310.8	2255.2	*2276.8*
20°	1923.6	1932.8	1976.8	2111.4	2270.1	2420.5	2489.5	2485.3	2413.9	2328.3	*2354.0*
22.5°	1828.9	1839.7	1886.2	2035.0	2231.1	2435.5	2591.7	2602.5	2507.8	2401.4	*2422.2*
25°	1722.5	1732.5	1792.3	1944.4	2163.8	2423.8	2678.9	2728.0	2614.1	2485.3	*2504.4*
27.5°	1613.7	1621.2	1680.2	1842.2	2075.7	2402.2	2747.9	2865.9	2718.8	2543.5	*2556.8*
30°	1518.1	1528.1	1582.1	1740.0	1979.3	2359.0	2804.4	3013.0	2839.3	2609.1	*2619.9*
32.5°	1425.9	1434.2	1493.2	1639.4	1877.1	2292.6	2855.1	3185.8	3018.0	2731.3	*2731.3*
35°	1309.6	1324.5	1391.0	1543.0	1780.7	2204.5	2891.7	3386.9	3262.3	2911.6	*2912.4*
37.5°	1202.4	1210.7	1280.5	1434.2	1679.3	2104.8	2895.0	3595.5	3571.4	3140.9	*3142.6*
40°	1080.2	1091.0	1165.8	1317.9	1563.0	2000.1	2863.4	3789.9	3895.4	3376.9	*3367.8*
42.5°	956.4	972.2	1043.7	1192.4	1437.5	1872.1	2779.5	3975.2	4306.7	3650.3	*3627.9*
45°	836.8	846.7	918.2	1058.6	1293.8	1719.2	2644.9	4153.0	4795.3	4065.8	*4033.4*
47.5°	702.1	706.3	780.2	914.9	1145.0	1548.9	2452.1	4311.7	5332.1	4615.9	*4560.2*
50°	582.5	588.3	646.5	762.0	963.1	1346.9	2212.0	4404.8	6016.0	5366.2	*5269.8*
52.5°	471.1	477.0	523.5	615.7	796.0	1116.8	1914.5	4383.2	6709.8	6297.7	*6157.2*
55°	380.6	384.7	416.3	488.6	626.5	888.3	1563.0	4189.6	7480.1	7514.2	*7211.7*
57.5°	321.6	323.2	344.8	388.9	489.4	684.7	1206.5	3732.6	8287.8	9066.3	*8569.4*
60°	287.5	288.3	298.3	325.7	386.4	522.7	884.1	3004.7	9124.5	11008.2	*10326.9*
62.5°	265.9	265.9	274.2	290.0	320.7	402.2	649.8	2157.9	9725.3	13121.3	*12444.1*
65°	245.1	245.1	250.9	264.2	280.9	328.2	487.8	1391.8	10020.3	14887.9	*14737.5*
67.5°	*218.5*	*219.4*	*223.5*	*237.6*	*252.6*	*274.2*	*369.8*	*941.5*	*9407.9*	*15376.5*	*16137.6*
70°	193.6	194.4	200.3	209.4	221.9	236.8	289.2	649.0	6847.7	12806.4	*14429.2*
72.5°	166.2	169.5	173.7	183.6	191.1	201.9	236.0	420.5	3984.3	8237.9	*9538.3*
75°	136.3	140.4	145.4	155.4	160.4	164.5	194.4	300.0	1917.0	4174.6	*4753.8*
77.5°	105.5	109.7	115.5	124.6	128.0	132.9	148.7	216.9	918.2	1850.5	*1995.1*
80°	70.6	72.3	77.3	88.1	93.9	97.2	109.7	147.9	398.8	742.9	*736.2*
82.5°	43.2	44.0	45.7	52.3	54.8	58.2	71.5	90.6	190.3	844.2	*968.0*
85°	15.8	15.0	14.1	18.3	21.6	24.9	33.2	45.7	83.1	580.0	*649.0*
87.5°	0.0	0.0	0.0	0.8	1.7	1.7	3.3	6.6	19.9	216.9	*148.7*
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P633537
CATALOG NUMBER: GWS-SA2E-830-U-T1-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9	1941.9
2.5°	1948.5	1939.4	1951.0	1959.3	1977.6	1984.3	1985.9	1980.1	1980.1	1970.1	1971.8
5°	1971.0	1965.2	1984.3	1998.4	2025.0	2035.0	2041.6	2037.5	2039.9	2033.3	2035.0
7.5°	2005.0	2000.1	2033.3	2060.7	2088.1	2099.8	2105.6	2102.3	2103.1	2094.8	2097.3
10°	2052.4	2054.1	2094.0	2129.7	2166.3	2177.9	2180.4	2170.4	2162.1	2147.1	2148.0
12.5°	2117.2	2125.5	2182.0	2221.9	2259.3	2275.9	2257.7	2221.1	2187.0	2161.3	2157.9
15°	2187.9	2202.8	2284.2	2334.9	2375.6	2367.3	2313.3	2231.1	2163.8	2125.5	2118.1
17.5°	2272.6	2295.0	2397.3	2457.9	2492.8	2439.6	2326.6	2203.6	2109.7	2058.2	2048.3
20°	2352.4	2388.1	2516.9	2595.8	2600.0	2480.3	2320.8	2148.0	2030.0	1966.8	1953.5
22.5°	2425.5	2471.2	2642.4	2742.9	2688.9	2498.6	2285.1	2069.0	1933.6	1859.6	1848.0
25°	2505.3	2570.1	2788.6	2882.5	2777.8	2491.1	2210.3	1971.0	1817.3	1741.6	1733.3
27.5°	2560.1	2641.5	2935.7	3025.4	2850.9	2448.8	2113.9	1863.8	1710.9	1639.4	1627.8
30°	2623.3	2727.1	3097.7	3180.8	2895.8	2386.4	2010.9	1764.1	1612.0	1534.7	1526.4
32.5°	2737.9	2868.4	3298.8	3345.3	2909.9	2309.2	1912.0	1667.7	1509.0	1431.7	1420.1
35°	2922.4	3075.3	3581.3	3529.0	2899.1	2224.4	1818.1	1554.7	1403.5	1331.2	1319.5
37.5°	3155.1	3345.3	3896.3	3694.3	2869.2	2131.4	1706.7	1460.0	1308.7	1235.6	1229.0
40°	3371.9	3606.3	4249.4	3837.3	2808.6	2016.7	1599.6	1361.1	1206.5	1129.2	1114.3
42.5°	3643.7	3955.3	4658.2	3961.1	2708.9	1879.6	1479.1	1238.9	1078.6	1008.8	990.5
45°	4056.6	4443.8	5133.5	4079.9	2560.1	1710.9	1327.8	1090.2	938.1	866.7	852.5
47.5°	4571.8	5054.6	5648.7	4150.5	2334.1	1533.1	1156.7	933.1	781.1	700.5	693.8
50°	5295.6	5942.9	6201.3	4138.1	2081.5	1322.0	963.9	746.2	619.0	560.9	551.7
52.5°	6177.2	7058.0	6798.7	3988.5	1813.1	1081.9	751.2	585.8	491.1	449.5	442.1
55°	7283.2	8393.3	7427.7	3667.8	1474.1	828.4	590.0	462.0	397.2	372.3	368.9
57.5°	8652.5	10122.5	8033.5	3127.6	1108.5	632.3	454.5	381.4	350.7	335.7	334.9
60°	10459.8	11958.0	8559.5	2430.5	793.5	483.6	375.6	340.7	316.6	306.6	305.8
62.5°	12608.6	13624.9	8886.9	1655.2	596.6	385.6	330.7	309.1	295.0	289.2	288.3
65°	14817.3	14678.5	8730.6	1084.4	452.9	327.4	296.6	285.0	272.5	266.7	266.7
67.5°	*16121.8*	*14455.8*	*7531.6*	*752.8*	*359.0*	*287.5*	*267.6*	*256.8*	*236.0*	*231.0*	*231.0*
70°	14279.6	11713.7	4936.6	550.9	290.8	251.8	232.7	217.7	209.4	204.4	203.6
72.5°	9444.4	7622.2	2624.9	382.2	242.6	214.4	196.9	191.1	181.1	176.2	175.3
75°	4700.6	4003.5	1345.3	275.9	201.9	172.0	164.5	162.0	153.7	147.1	145.4
77.5°	1959.3	1782.4	627.4	200.3	153.7	138.8	132.1	132.1	123.0	115.5	112.2
80°	738.7	658.1	296.6	137.1	113.8	103.0	98.9	95.6	88.1	78.9	74.0
82.5°	988.0	645.6	145.4	85.6	74.8	66.5	60.7	58.2	54.0	49.9	46.5
85°	639.8	458.7	65.6	44.0	37.4	28.3	24.9	23.3	20.8	18.3	16.6
87.5°	130.5	153.7	19.9	8.3	5.0	2.5	2.5	0.8	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

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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

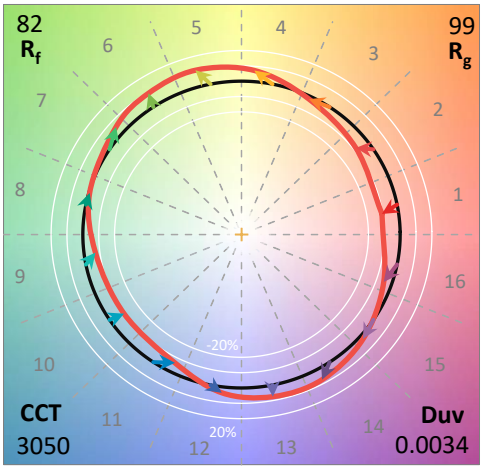
Test Information

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

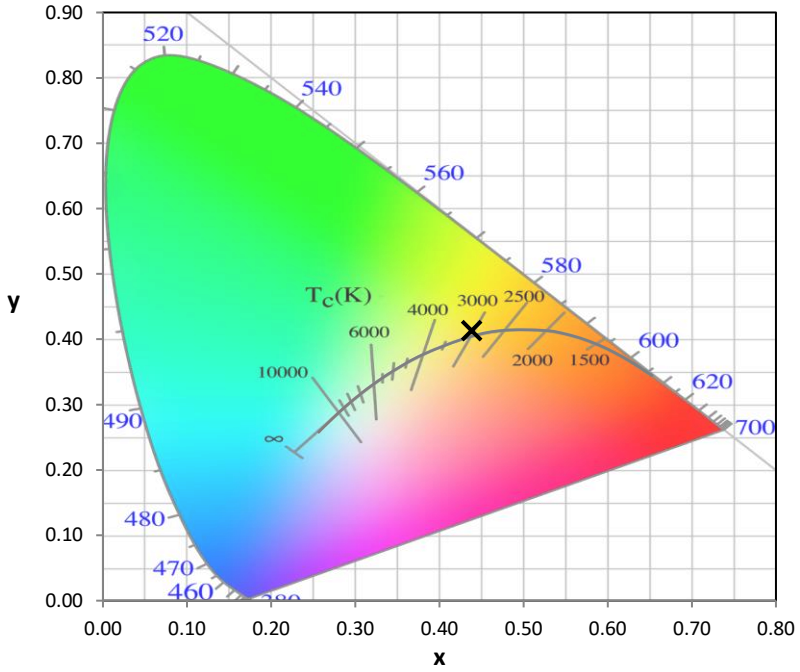
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

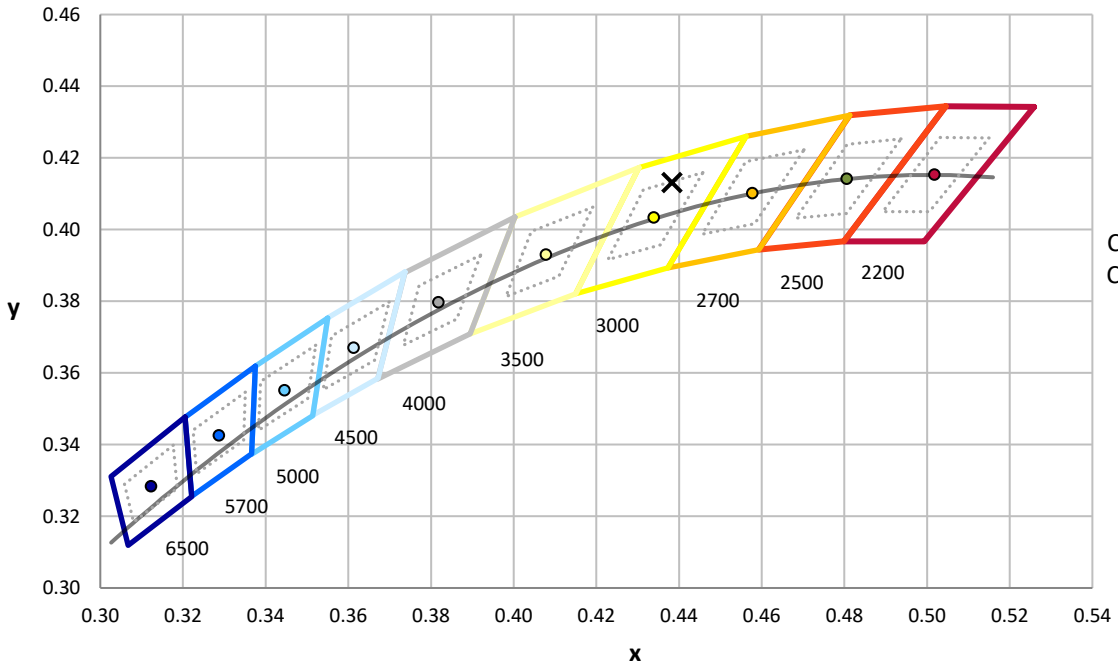
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

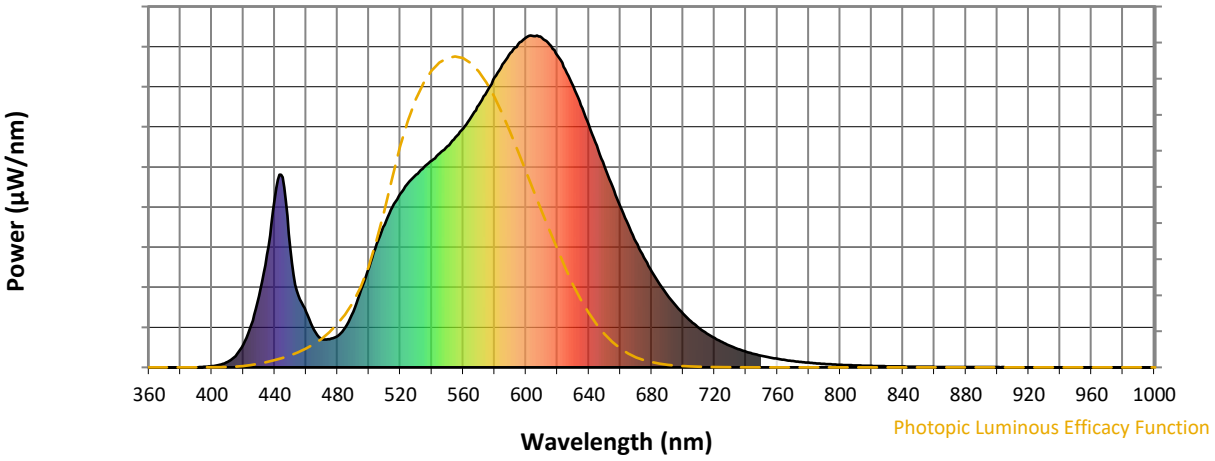


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

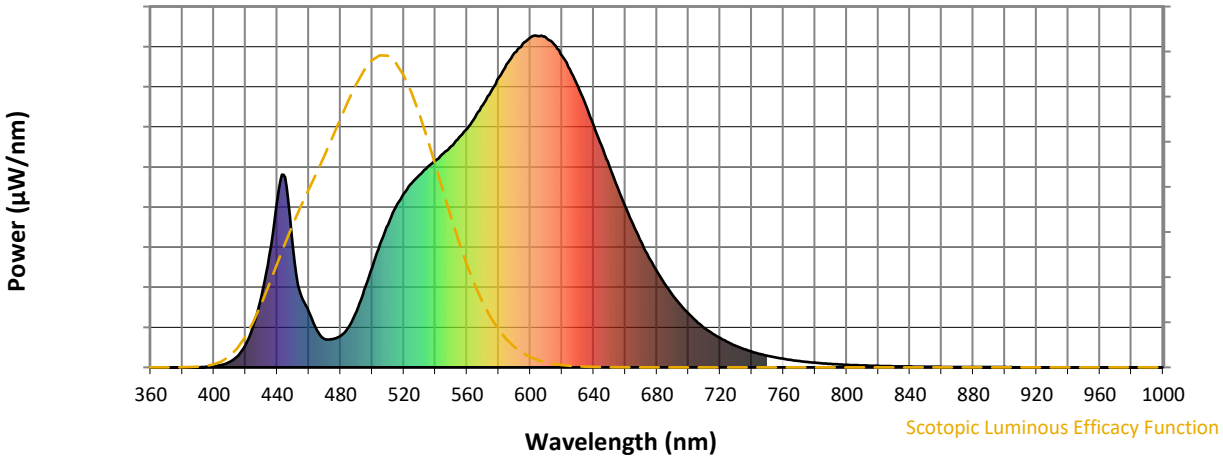


Photopic Lumens: NR

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

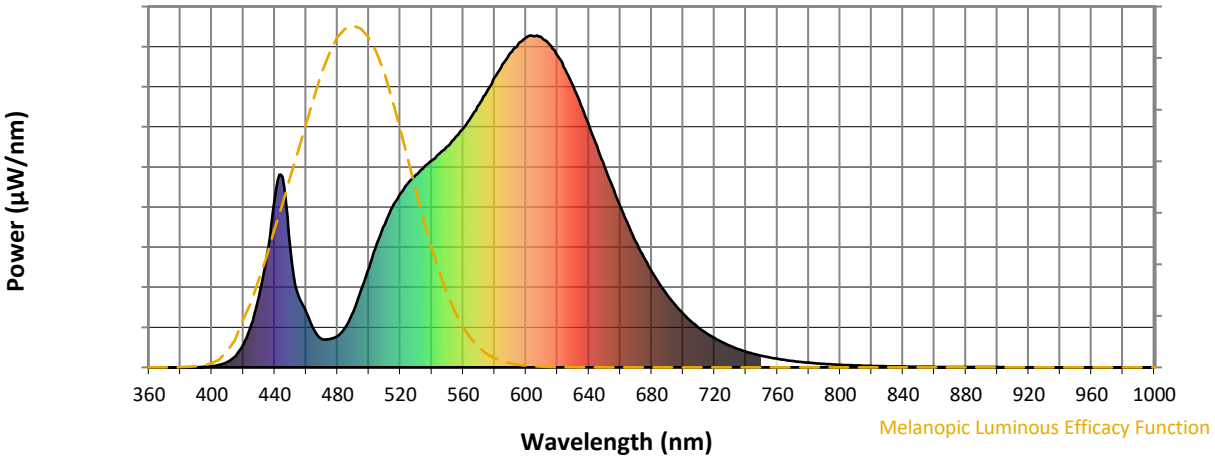


Scotopic Lumens: NR **S/P: 1.27**

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			

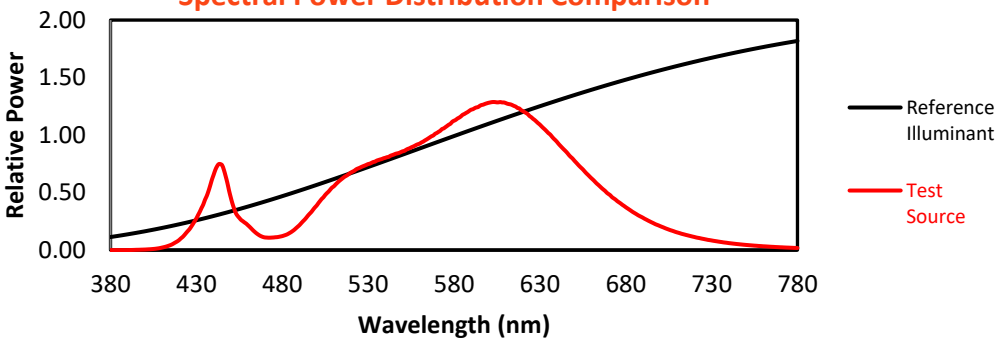
REPORT NUMBER: SP1-2408-195-9

TM-30-18

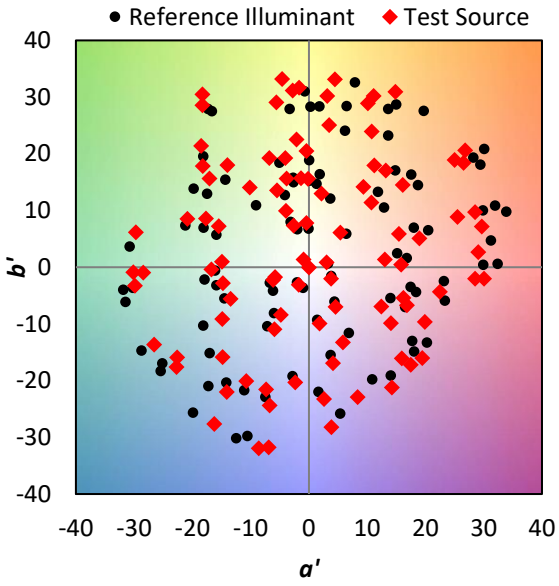
Summary

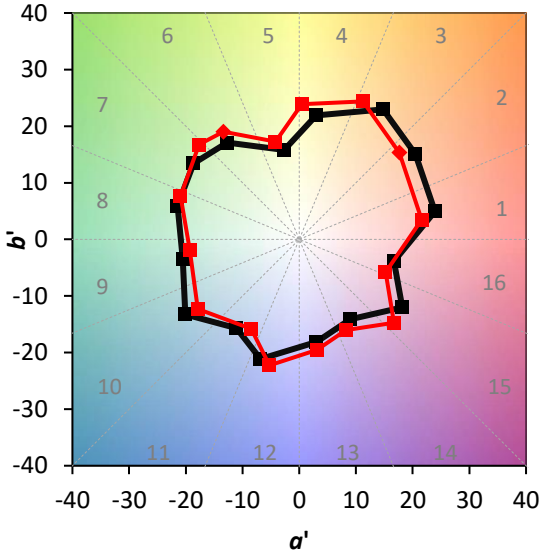
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

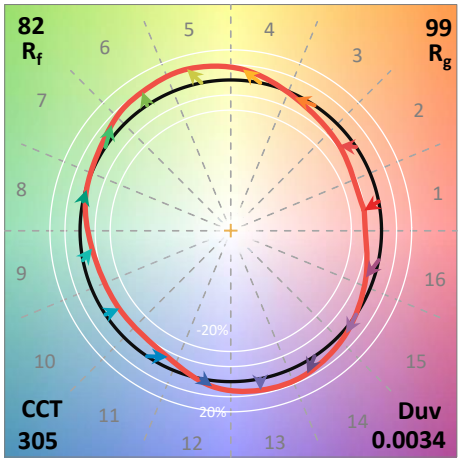
Spectral Power Distribution Comparison

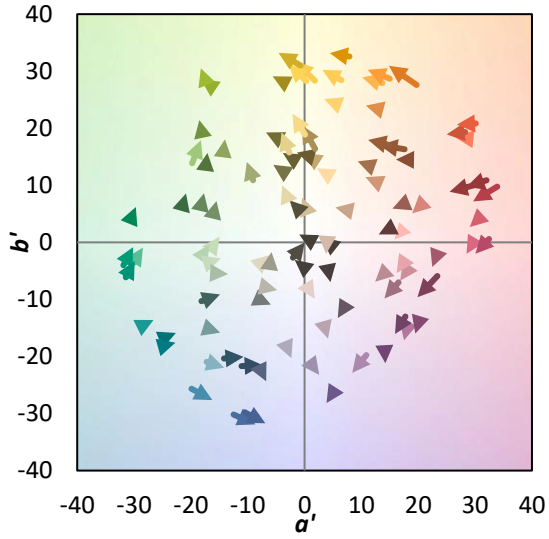


Color Vector Graphics







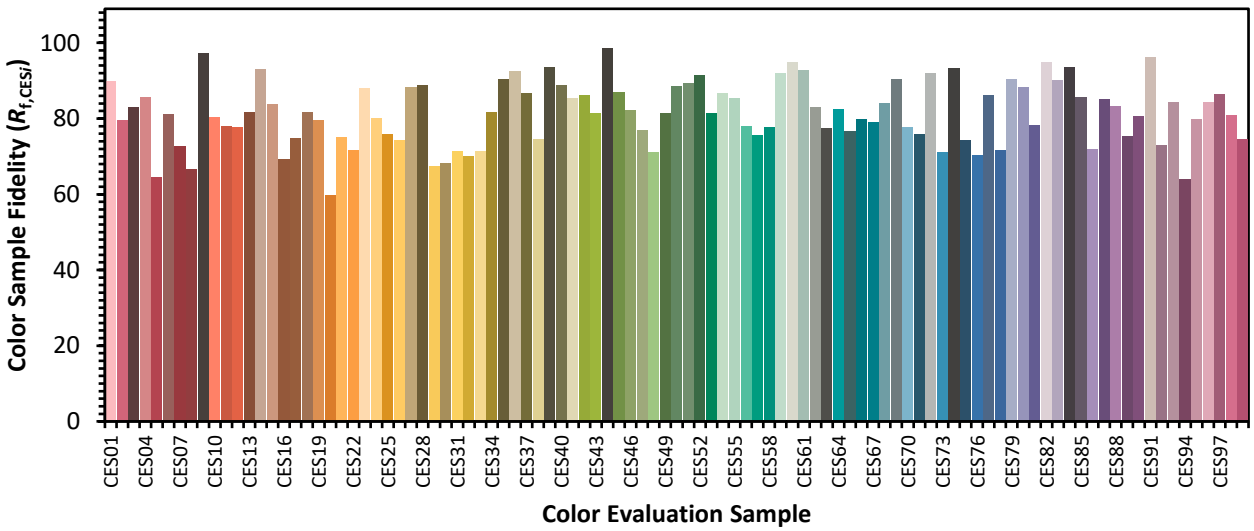


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

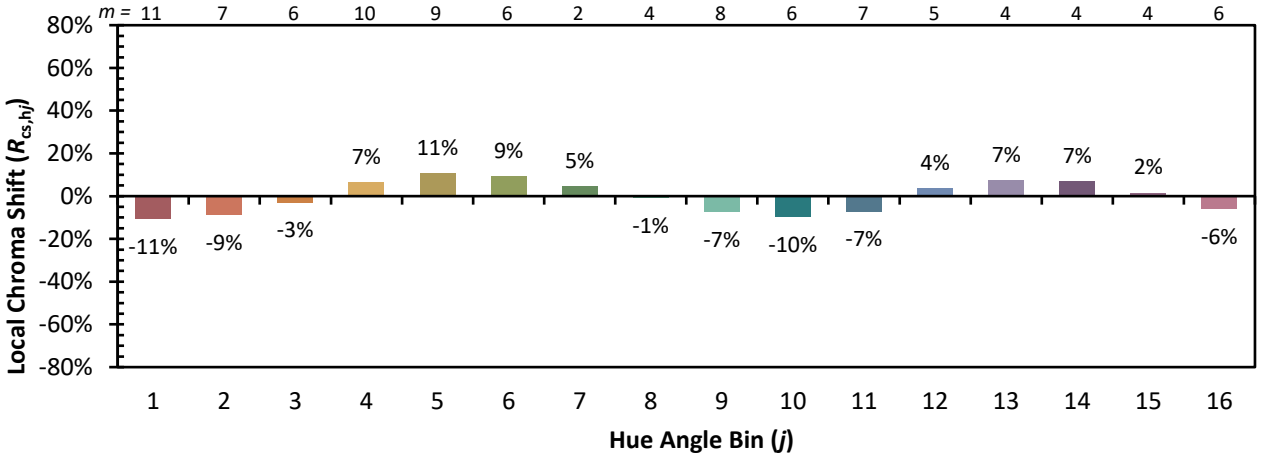
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

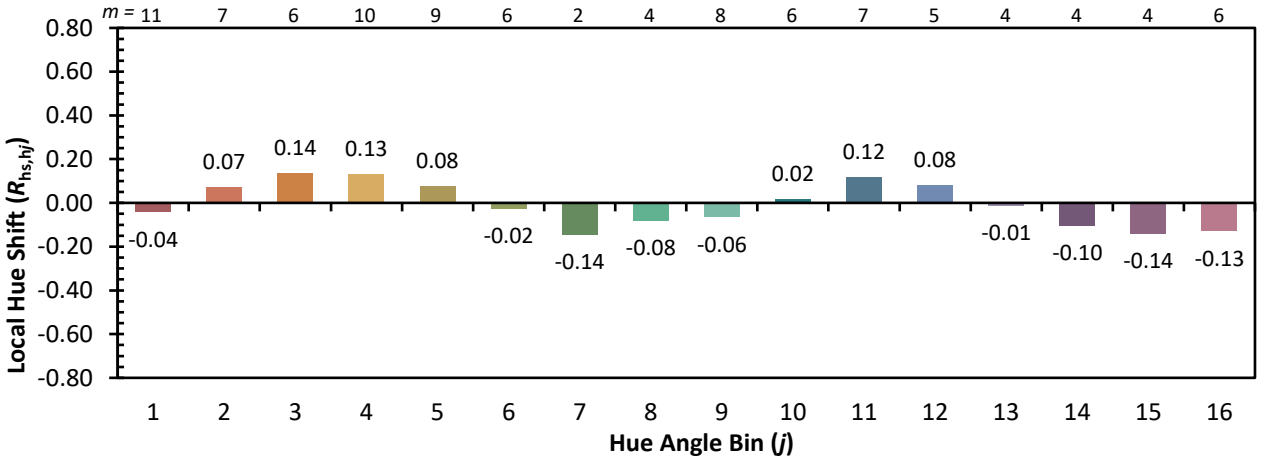


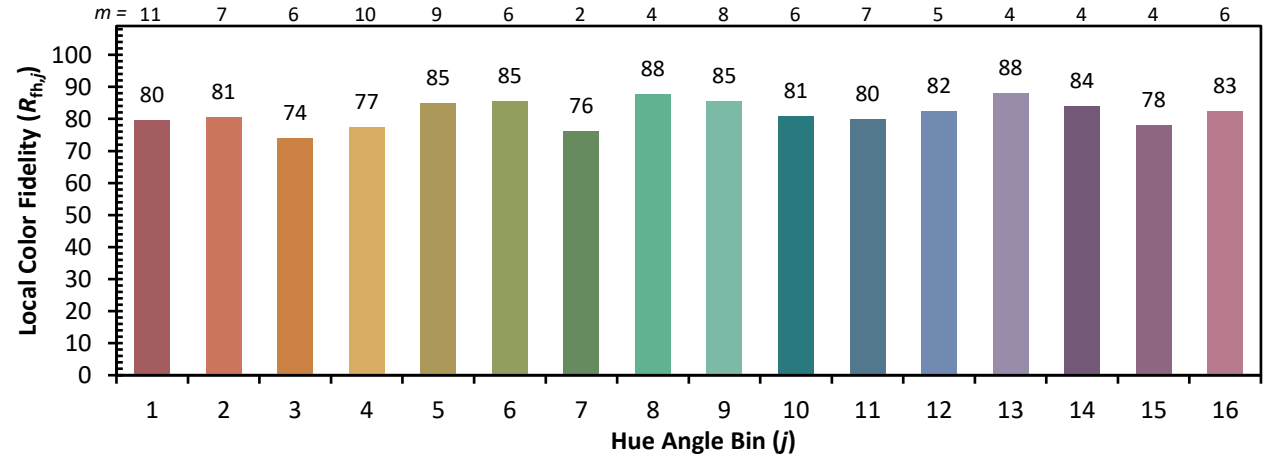
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



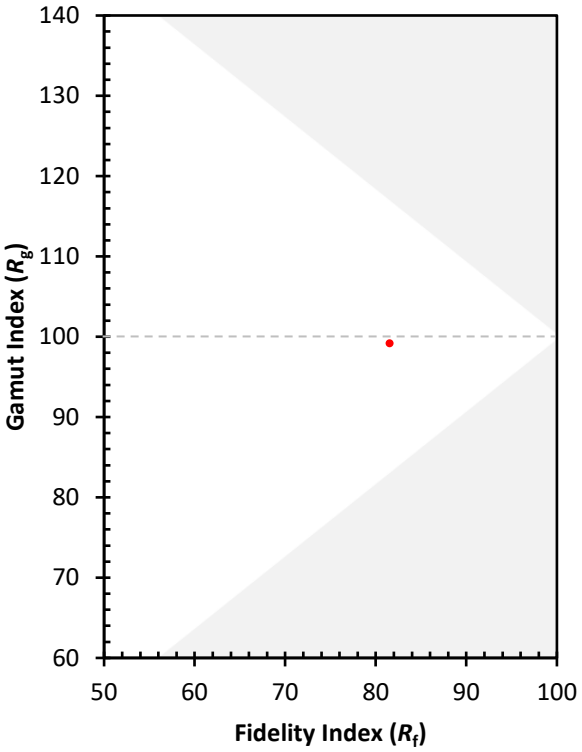


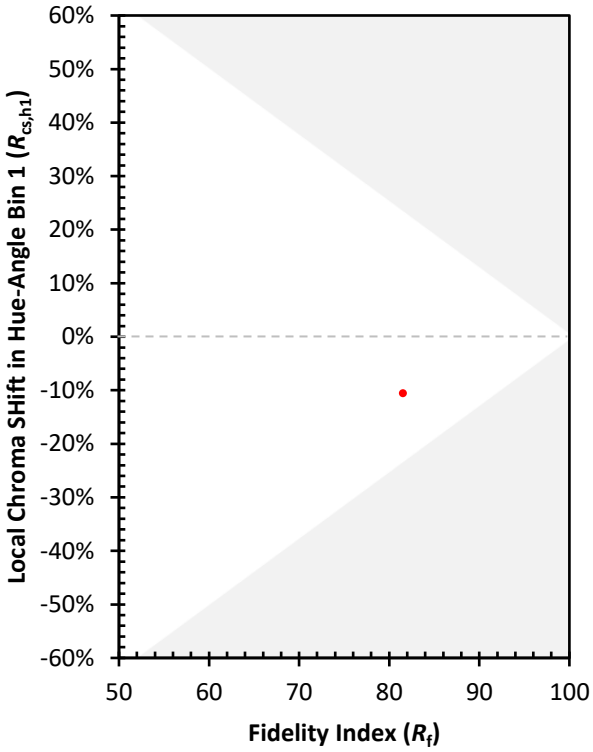


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)