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: P636987

Luminaire Tested: GWS-SA4B-830-U-SL2-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:	P636987
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-27)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4B-830-U-SL2-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11299.2 lumens
Efficiency:	N/A
Efficacy:	119.7 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G2

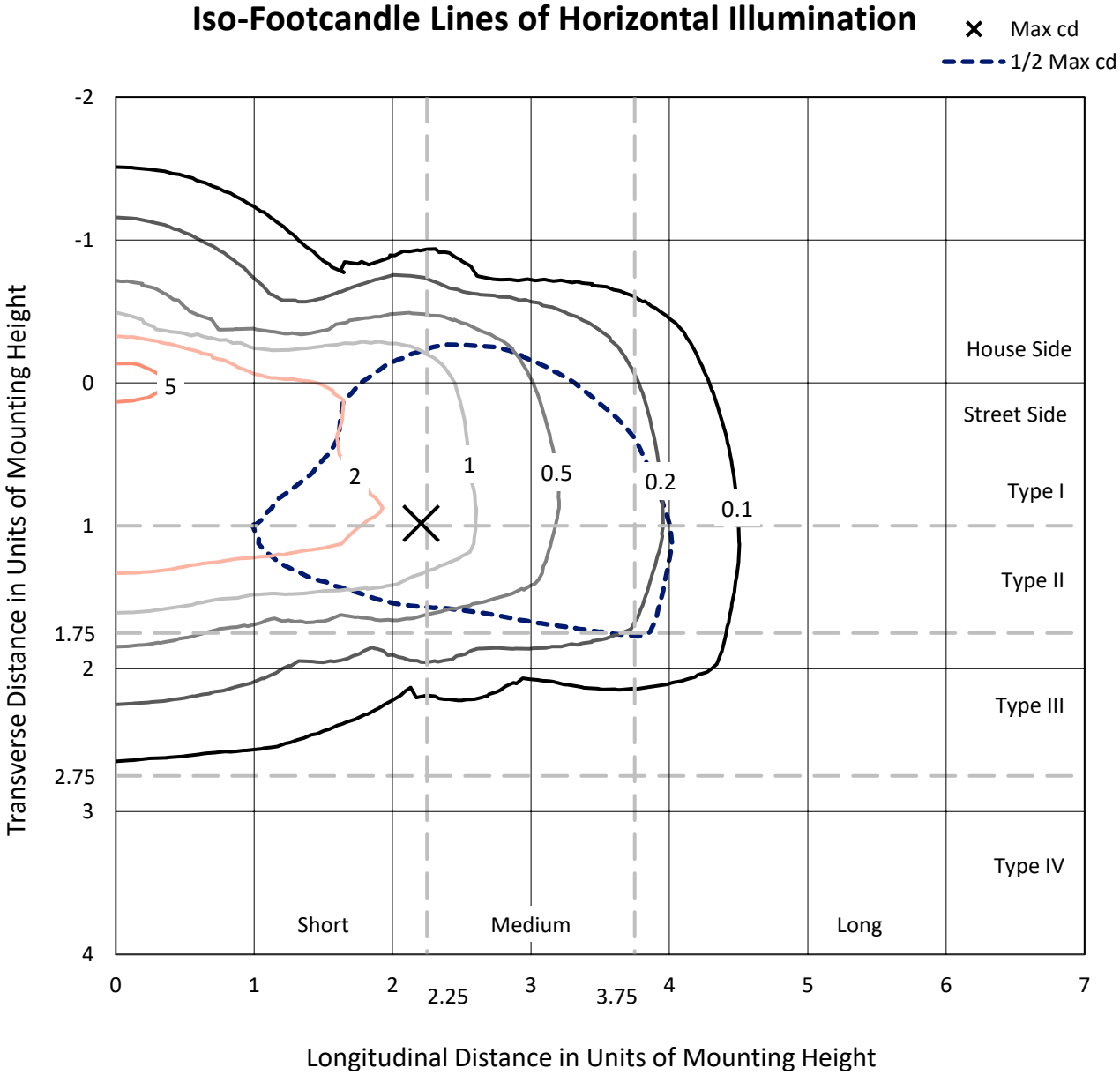
Input Watts (W):	94.4
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P636987
CATALOG NUMBER: GWS-SA4B-830-U-SL2-W

Iso-Footcandle Lines of Horizontal Illumination



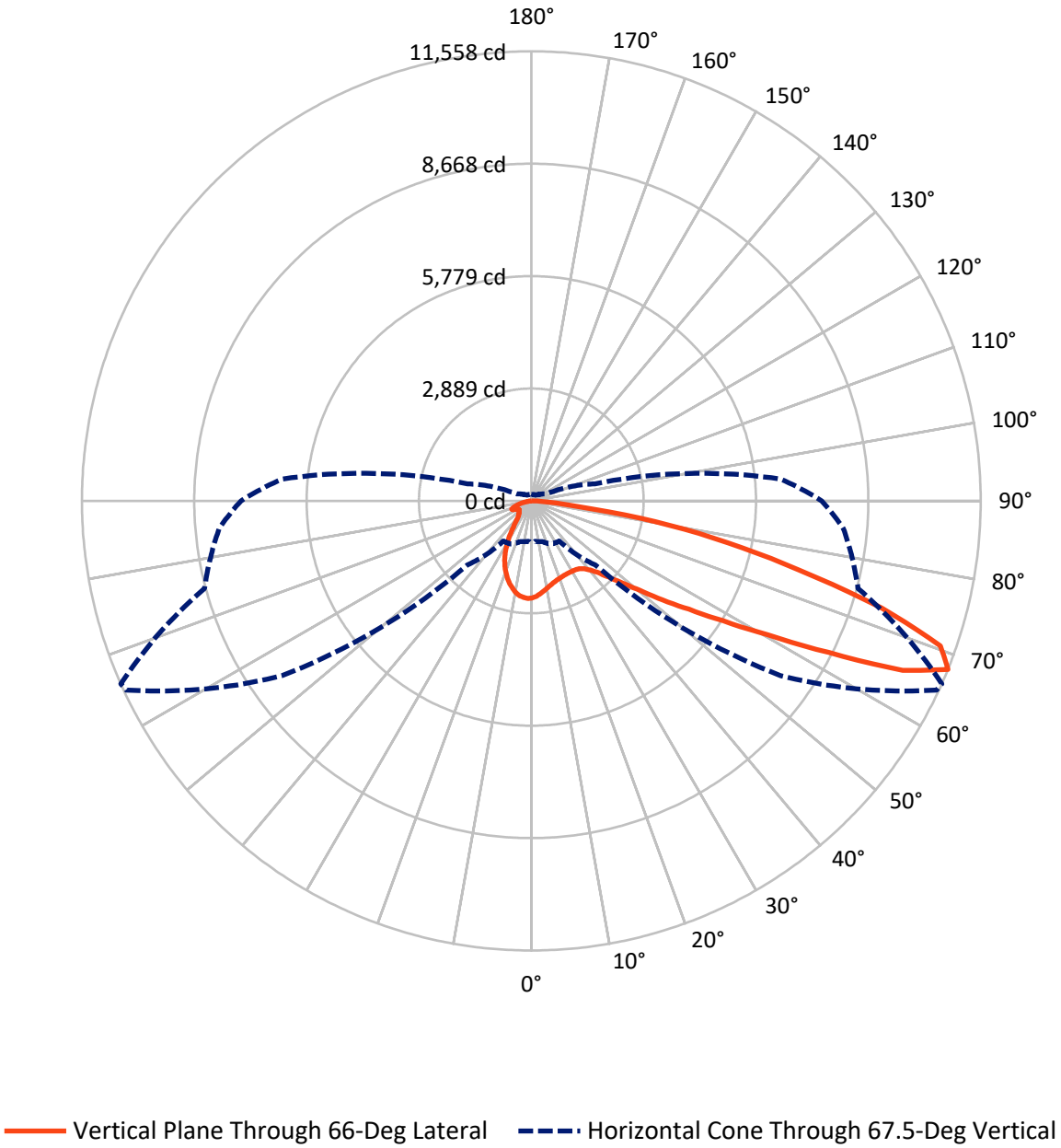
Based on 20 foot mounting height. Maximum calculated value = 6.2 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P636987
CATALOG NUMBER: GWS-SA4B-830-U-SL2-W

Luminous Intensity Polar Plot



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

Scaled Data Report

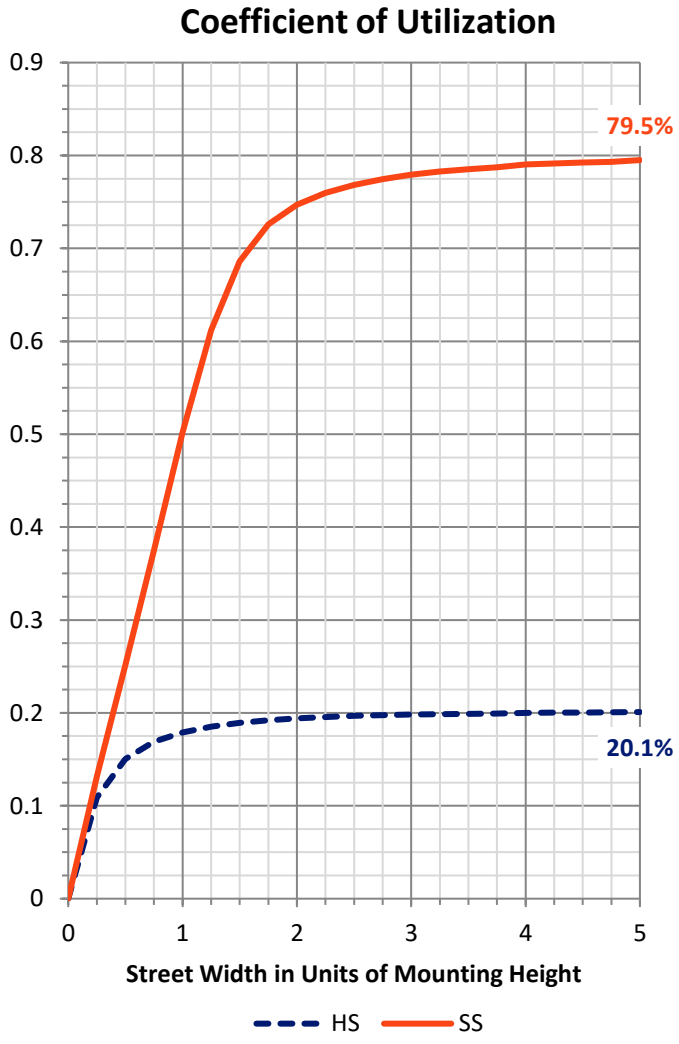
REPORT NUMBER: P636987
CATALOG NUMBER: GWS-SA4B-830-U-SL2-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2292.9	0.0	2292.9
	% Fixture	20.3	0.0	20.3
Street Side	Lumens	9006.3	0.0	9006.3
	% Fixture	79.7	0.0	79.7
Total	Lumens	11299.2	0.0	11299.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.1	1.9
10°-20°	538.5	4.8
20°-30°	740.2	6.6
30°-40°	1012.0	9.0
40°-50°	1533.5	13.6
50°-60°	2383.8	21.1
60°-70°	2902.2	25.7
70°-80°	1767.9	15.6
80°-90°	201.9	1.8
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°	11299.2	100.0
0°-180°	11299.2	100.0



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

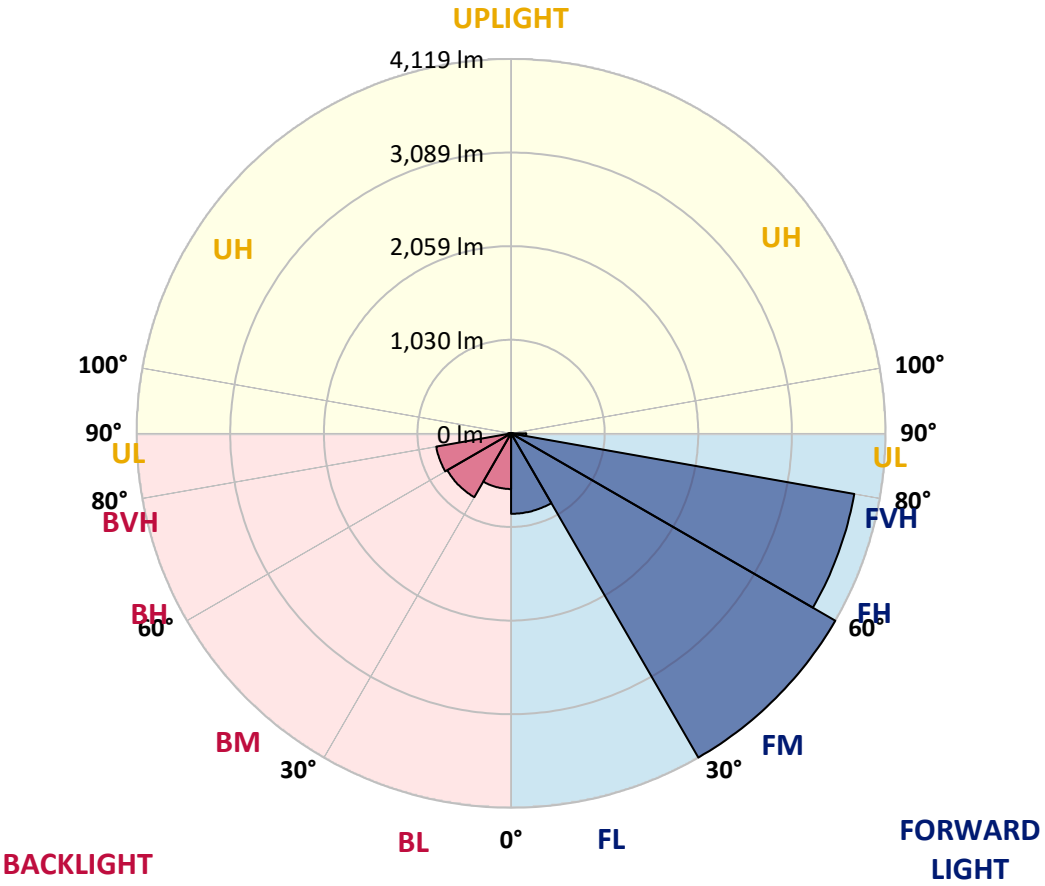
Scaled Data Report

REPORT NUMBER: P636987
CATALOG NUMBER: GWS-SA4B-830-U-SL2-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	885.3	7.8			
FM	(30°-60°)	4119.0	36.5			
FH	(60°-80°)	3834.1	33.9			G2/5000
FVH	(80°-90°)	167.9	1.5			G2/225
BL	(0°-30°)	612.5	5.4	B2/1000		
BM	(30°-60°)	810.3	7.2	B1/1000		
BH	(60°-80°)	836.0	7.4	B2/1000		G2/1000
BVH	(80°-90°)	34.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
Type II Short



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

Scaled Data Report

REPORT NUMBER: P636987
CATALOG NUMBER: GWS-SA4B-830-U-SL2-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2496.8	2496.8	2496.8	2496.8	2496.8	2496.8	2496.8	2496.8	*2496.8*	2496.8	2496.8
2.5°	2338.5	2346.8	2341.8	2373.2	2374.8	2414.4	2436.6	2455.6	*2457.2*	2482.0	2498.5
5°	2178.6	2183.6	2183.6	2213.2	2233.0	2285.8	2336.9	2391.3	*2395.4*	2454.8	2500.1
7.5°	2049.2	2054.2	2050.9	2090.4	2116.0	2174.5	2239.6	2322.9	*2331.1*	2426.7	2505.9
10°	1947.8	1946.2	1954.4	1990.7	2023.7	2093.7	2166.3	2261.1	*2273.4*	2394.6	2512.5
12.5°	1878.6	1880.2	1885.2	1923.1	1958.5	2027.8	2102.8	2205.8	*2219.0*	2357.5	2509.2
15°	1845.6	1842.3	1846.4	1881.1	1914.8	1975.8	2053.3	2159.7	*2172.9*	2324.5	2510.0
17.5°	1838.2	1835.7	1834.9	1859.6	1885.2	1942.0	2016.2	2124.2	*2138.2*	2303.1	2514.9
20°	1861.3	1858.0	1848.9	1859.6	1870.3	1918.1	1989.9	2098.7	*2114.3*	2289.1	2524.8
22.5°	1924.7	1919.0	1905.0	1891.8	1877.8	1906.6	1973.4	2079.7	*2095.4*	2280.0	2534.7
25°	2021.2	2016.2	2001.4	1971.7	1920.6	1915.7	1970.1	2071.5	*2087.1*	2273.4	2538.8
27.5°	2153.9	2146.5	2131.6	2088.8	2005.5	1949.5	1982.4	2070.6	*2085.5*	2266.0	2534.7
30°	2311.3	2306.4	2298.1	2246.2	2134.9	2021.2	2010.5	2077.2	*2088.8*	2261.9	2526.5
32.5°	2471.2	2466.3	2472.9	2448.2	2311.3	2139.9	2071.5	2095.4	*2103.6*	2261.1	2519.1
35°	2612.2	2618.0	2665.8	2669.9	2535.5	2300.6	2167.9	2137.4	*2139.1*	2277.5	2522.4
37.5°	2759.8	2782.0	2844.7	2898.2	2786.1	2513.3	2311.3	2216.5	*2214.9*	2319.6	2543.0
40°	2955.1	2965.0	3045.0	3145.5	3075.5	2805.1	2514.9	2346.0	*2334.4*	2405.3	2598.2
42.5°	3145.5	3169.4	3297.2	3412.6	3389.5	3134.0	2771.3	2539.7	*2519.1*	2557.0	2711.9
45°	3387.9	3411.0	3554.4	3702.8	3744.8	3505.7	3099.4	2815.0	*2794.4*	2785.3	2920.5
47.5°	3630.2	3654.1	3782.7	3997.0	4144.6	3970.6	3526.4	3178.5	*3144.7*	3109.3	3235.4
50°	3793.4	3821.5	3944.3	4201.5	4547.7	4551.0	4032.5	3654.9	*3612.1*	3556.0	3678.8
52.5°	3787.7	3805.8	3922.8	4219.6	4837.8	5217.8	4710.0	4261.6	*4227.0*	4105.0	4212.2
55°	3490.1	3517.3	3635.2	4006.1	4869.1	5850.1	5705.8	4977.1	*4915.3*	4696.9	4814.7
57.5°	2892.5	2915.5	3034.2	3491.7	4591.3	6174.0	6970.3	5888.8	*5803.9*	5341.5	5477.5
60°	2183.6	2155.5	2211.6	2612.2	3927.0	6182.2	8086.4	7125.2	*6983.5*	6030.6	6144.3
62.5°	1638.7	1610.7	1623.0	1736.0	2662.5	5682.7	8722.7	8816.7	*8582.6*	6808.7	6786.5
65°	1295.0	1279.3	1314.8	1392.2	1552.2	4327.6	8727.7	10645.8	*10498.3*	7710.5	7445.1
67.5°	*1055.1*	*1045.2*	*1081.5*	*1224.9*	*1258.7*	*2325.3*	*7825.9*	*11499.8*	*11557.5*	*8698.0*	*8055.9*
70°	849.9	835.0	891.9	1080.7	1170.5	1407.1	5606.1	11064.6	*11157.7*	9286.6	7883.6
72.5°	586.9	587.7	616.6	875.4	1130.1	1215.0	3171.1	9213.2	*9415.1*	8753.2	6930.7
75°	395.7	399.0	407.2	577.8	1041.1	1178.7	1689.8	6975.2	*7117.8*	7234.9	5728.9
77.5°	239.0	240.7	259.7	349.5	718.0	1100.4	1145.0	5056.3	*5168.4*	4769.4	3551.1
80°	138.5	144.3	161.6	234.1	484.7	826.8	886.1	3100.2	*3227.1*	2120.1	1128.5
82.5°	61.0	65.1	88.2	136.0	282.7	703.1	691.6	1224.9	*1206.8*	591.0	391.5
85°	10.7	13.2	19.0	42.9	103.9	370.9	536.6	540.7	*508.6*	224.2	162.4
87.5°	0.0	0.0	0.0	0.0	0.0	2.5	80.8	145.1	*144.3*	63.5	56.1
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: P636987
CATALOG NUMBER: GWS-SA4B-830-U-SL2-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2496.8	2496.8	2496.8	2496.8	2496.8	2496.8	2496.8	2496.8	2496.8	2496.8	2496.8
2.5°	2509.2	2486.9	2506.7	2509.2	2505.0	2501.7	2477.0	2455.6	2453.1	2430.0	2430.0
5°	2518.2	2497.6	2507.5	2488.6	2458.9	2428.4	2375.6	2339.4	2322.9	2293.2	2293.2
7.5°	2530.6	2509.2	2497.6	2450.6	2381.4	2314.6	2229.7	2158.8	2130.0	2087.9	2086.3
10°	2542.1	2514.9	2475.4	2383.9	2273.4	2167.1	2043.4	1942.9	1874.5	1824.2	1824.2
12.5°	2541.3	2505.9	2427.6	2292.4	2139.9	1985.7	1820.9	1669.2	1578.5	1500.2	1495.3
15°	2539.7	2491.0	2366.6	2186.0	1984.1	1770.6	1546.4	1348.6	1214.2	1137.5	1130.9
17.5°	2538.0	2472.1	2298.1	2064.9	1794.5	1503.5	1207.6	993.3	881.2	834.2	835.8
20°	2538.0	2450.6	2224.8	1925.6	1576.1	1183.7	886.1	730.3	702.3	704.8	707.2
22.5°	2530.6	2424.3	2143.2	1773.9	1332.9	870.5	653.7	600.9	615.8	638.8	642.1
25°	2513.3	2380.6	2048.4	1605.7	1043.6	633.9	533.3	523.4	550.6	579.5	587.7
27.5°	2486.1	2330.3	1942.0	1408.7	768.2	509.4	469.0	468.2	489.6	511.1	518.5
30°	2457.2	2274.2	1829.9	1189.5	556.4	443.5	427.8	427.8	438.5	451.7	450.1
32.5°	2423.4	2217.4	1709.6	961.1	453.4	406.4	401.4	399.0	400.6	405.6	405.6
35°	2394.6	2167.1	1586.0	719.6	406.4	385.8	380.8	375.1	372.6	369.3	370.9
37.5°	2383.9	2127.5	1458.2	542.4	383.3	370.9	362.7	354.4	348.7	347.0	346.2
40°	2401.2	2111.0	1330.4	446.8	366.8	355.3	346.2	335.5	330.5	330.5	330.5
42.5°	2468.8	2123.4	1200.2	403.9	355.3	342.1	328.9	319.0	317.4	319.0	319.8
45°	2592.4	2171.2	1065.0	382.5	345.4	328.9	313.2	305.8	305.8	307.5	307.5
47.5°	2813.3	2296.5	931.5	369.3	335.5	318.2	301.7	294.3	293.5	295.1	295.1
50°	3195.8	2522.4	811.1	360.2	328.1	309.9	293.5	283.6	281.1	280.3	280.3
52.5°	3678.0	2913.9	734.5	353.6	319.0	300.9	284.4	271.2	266.2	263.8	263.8
55°	4260.8	3435.7	734.5	348.7	307.5	290.2	271.2	258.0	250.6	247.3	247.3
57.5°	4921.1	4043.2	861.4	344.6	298.4	277.8	257.2	244.0	235.7	230.8	230.8
60°	5592.9	4685.3	1175.5	338.8	290.2	262.1	241.5	229.2	218.4	212.7	211.8
62.5°	6289.4	5392.6	1589.2	342.1	284.4	247.3	225.0	211.0	202.0	196.2	195.4
65°	6927.4	6066.0	1951.1	367.6	285.2	234.1	206.1	193.7	186.3	178.9	178.0
67.5°	*7469.0*	*6437.8*	*1697.2*	*419.6*	*302.5*	*218.4*	*187.1*	*174.8*	*168.2*	*163.2*	*162.4*
70°	7089.8	5870.7	962.8	451.7	326.4	202.0	165.7	157.4	150.8	147.5	146.7
72.5°	6062.7	4970.5	643.8	399.0	297.6	180.5	145.9	139.3	134.4	130.2	129.4
75°	4911.2	3941.8	492.1	327.2	231.6	146.7	125.3	120.3	115.4	111.3	110.5
77.5°	2905.7	2277.5	362.7	258.8	163.2	114.6	103.9	99.7	94.8	91.5	90.7
80°	927.3	791.3	230.0	178.0	108.0	88.2	80.0	76.7	71.7	67.6	66.8
82.5°	353.6	305.8	122.0	90.7	71.7	60.2	53.6	50.3	47.0	42.9	42.0
85°	156.6	146.7	67.6	48.6	38.7	29.7	26.4	24.7	20.6	17.3	16.5
87.5°	55.2	55.2	28.9	14.0	8.2	4.1	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

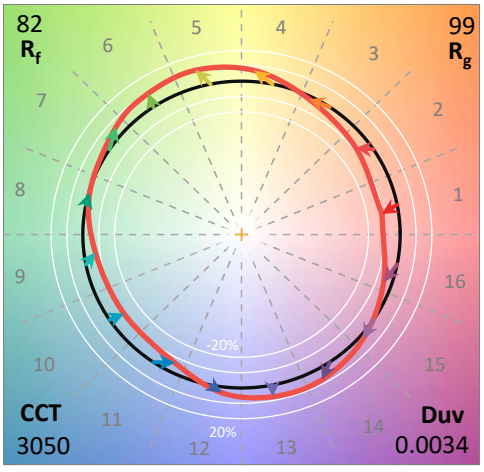
Test Information

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

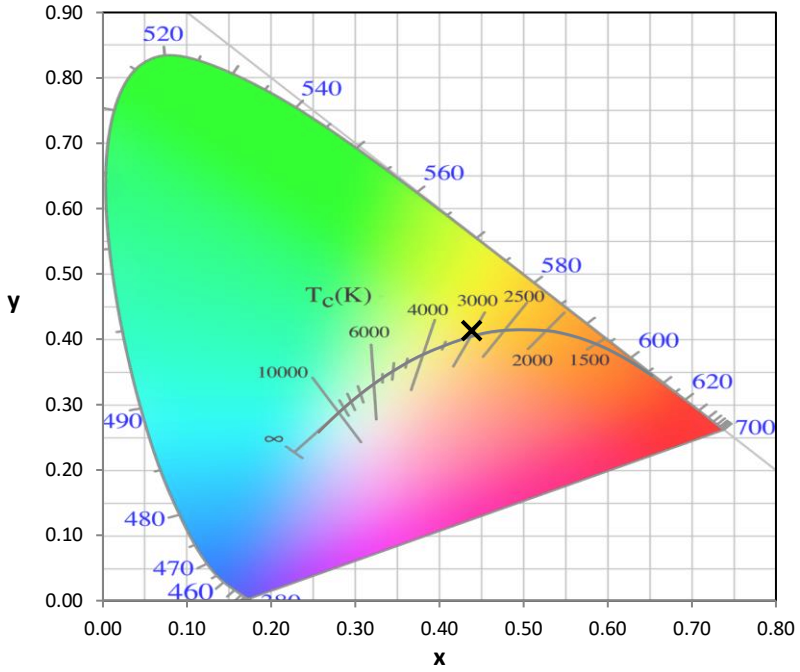
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

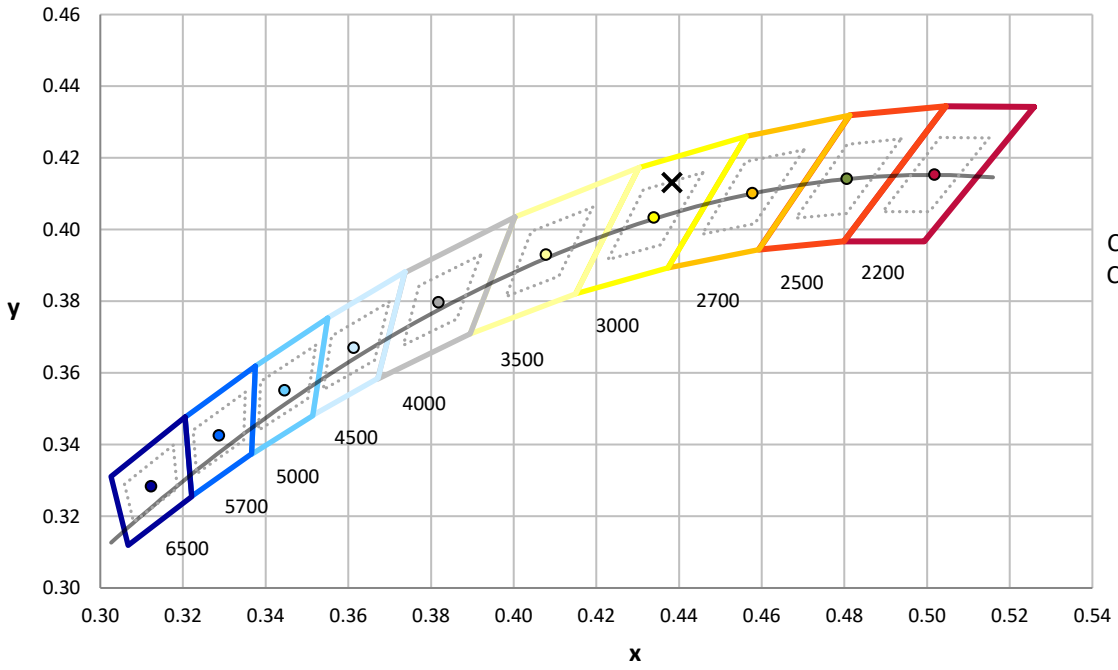
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

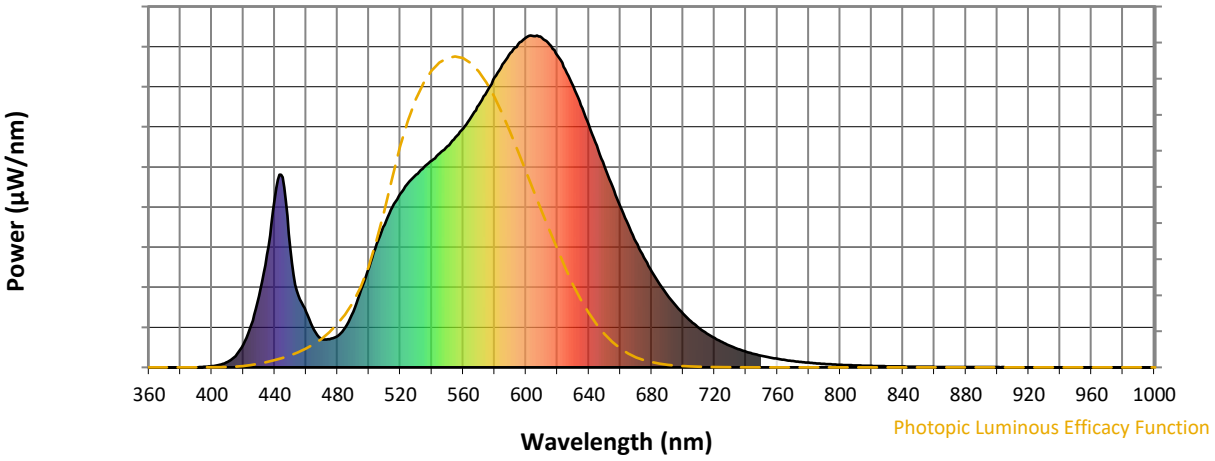


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

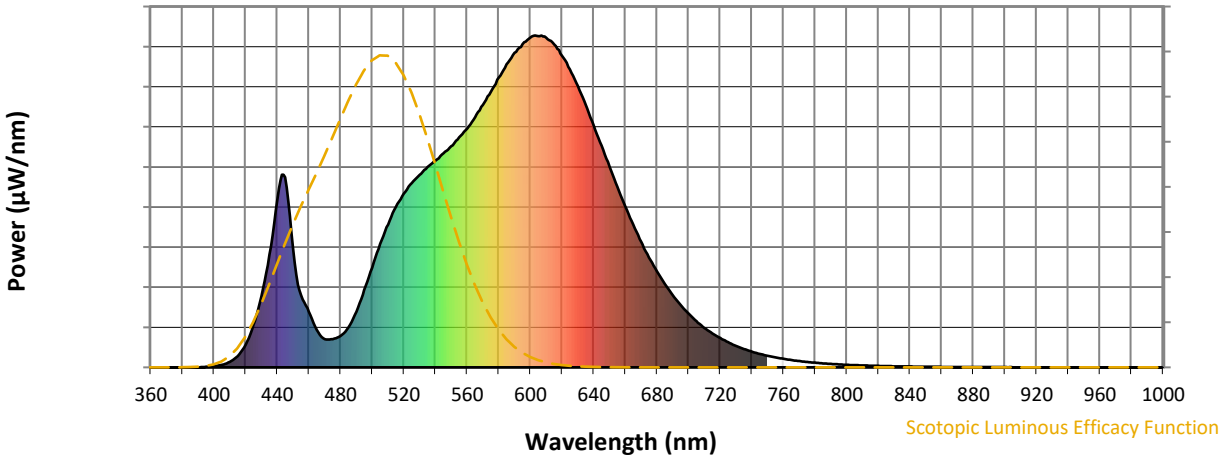


Photopic Lumens: NR

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

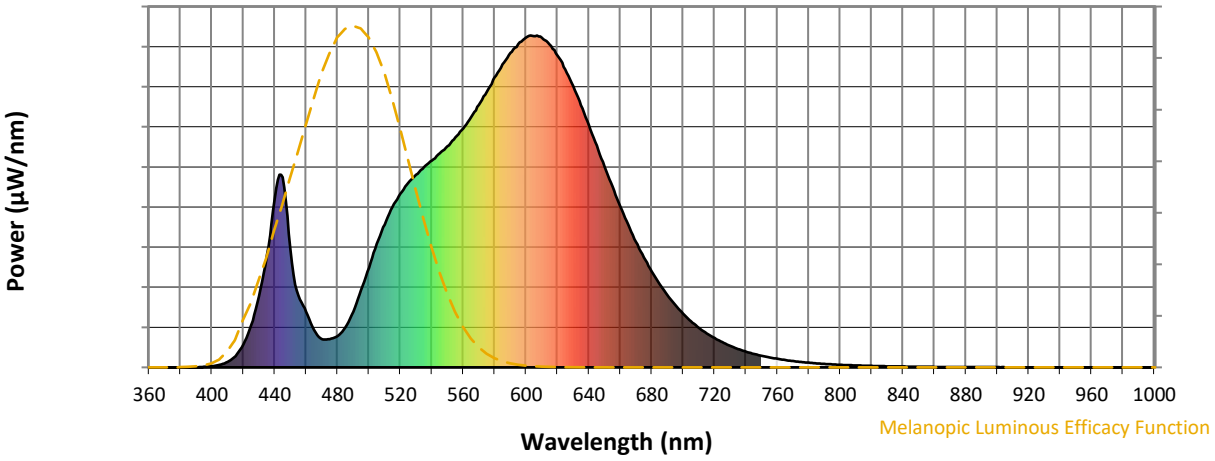


Scotopic Lumens: NR **S/P: 1.27**

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			

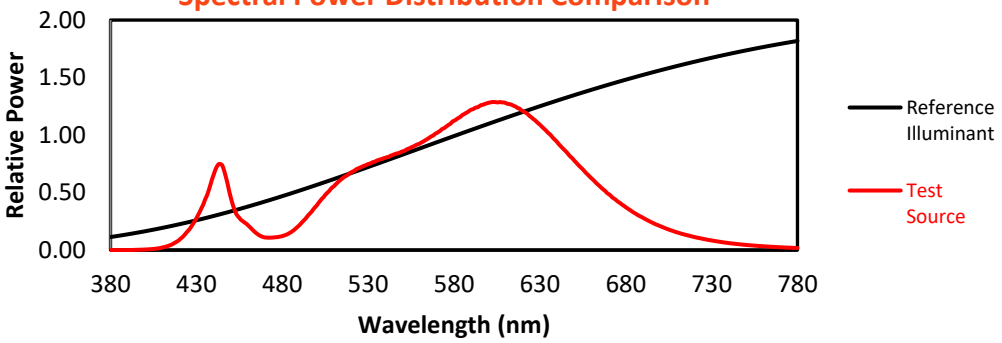
REPORT NUMBER: SP1-2408-195-9

TM-30-18

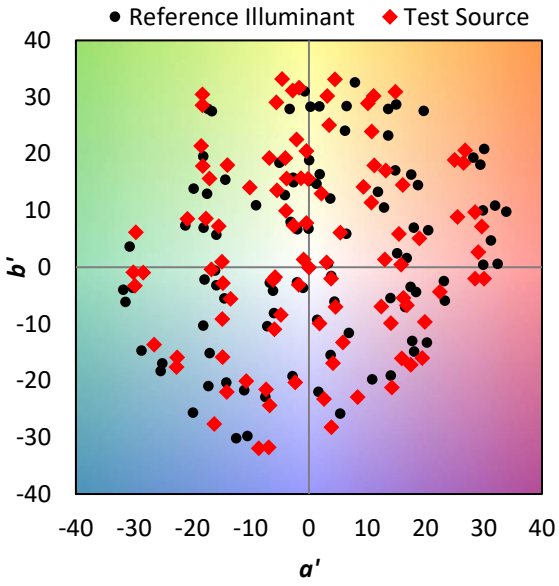
Summary

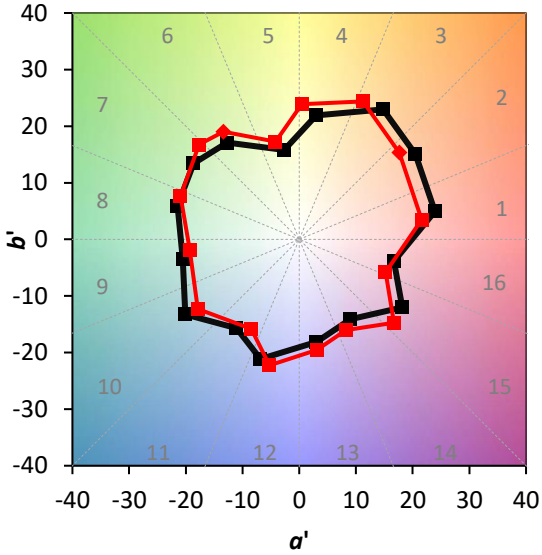
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

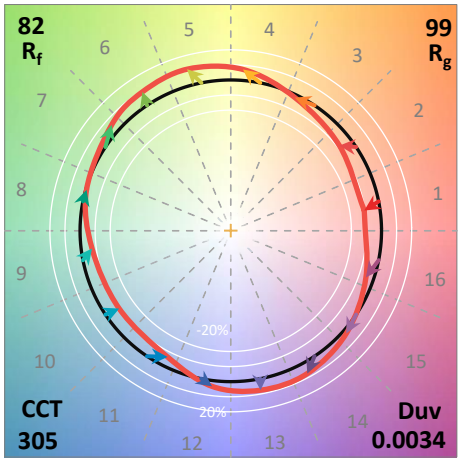
Spectral Power Distribution Comparison

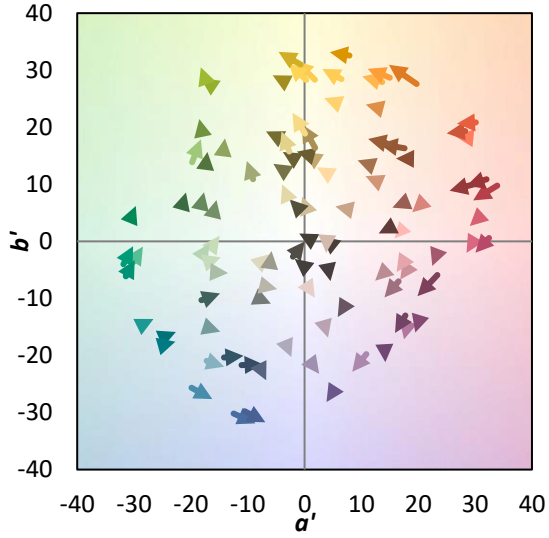


Color Vector Graphics







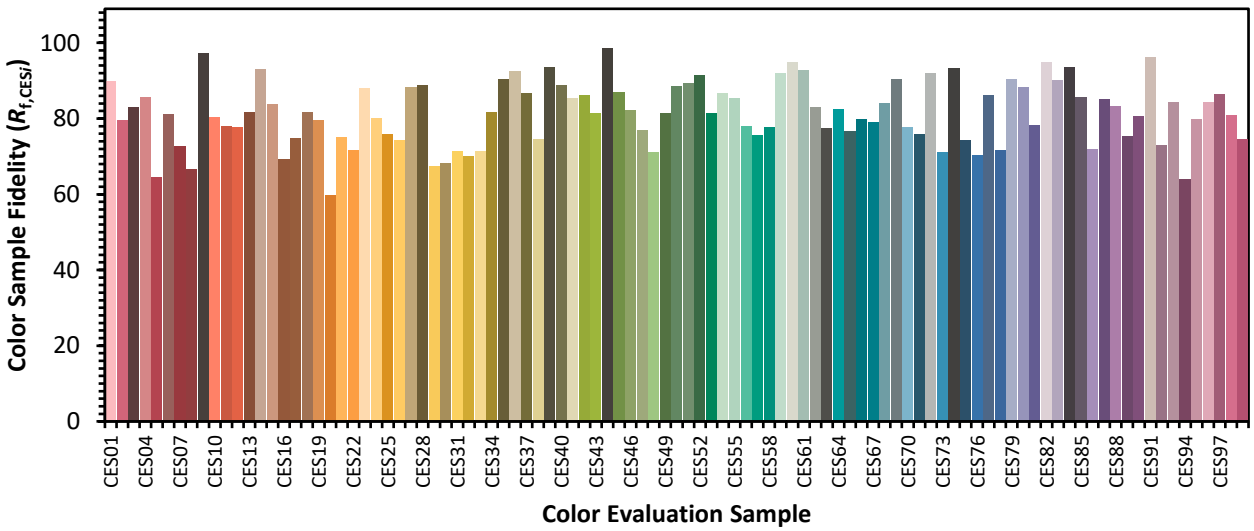


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

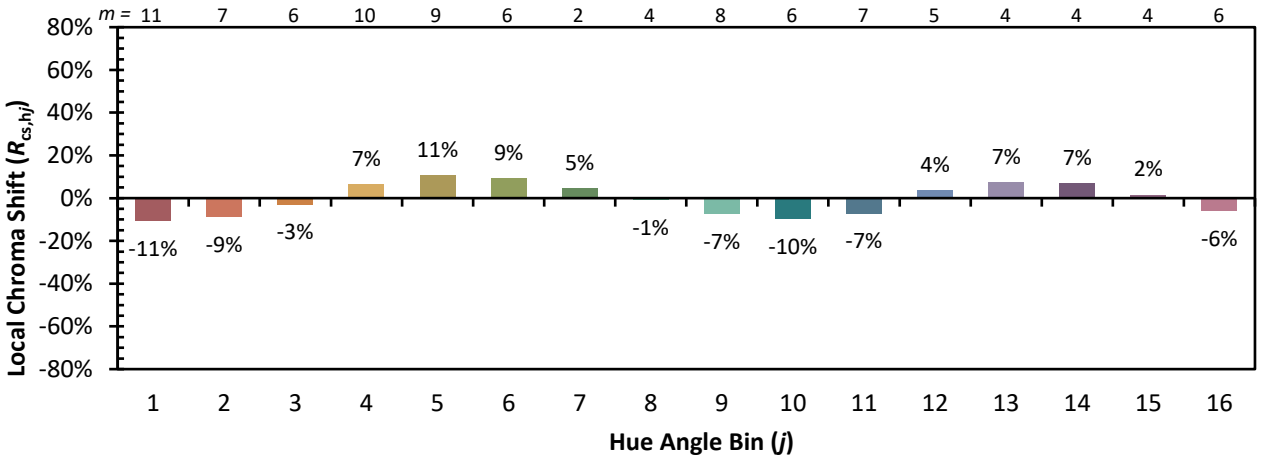
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

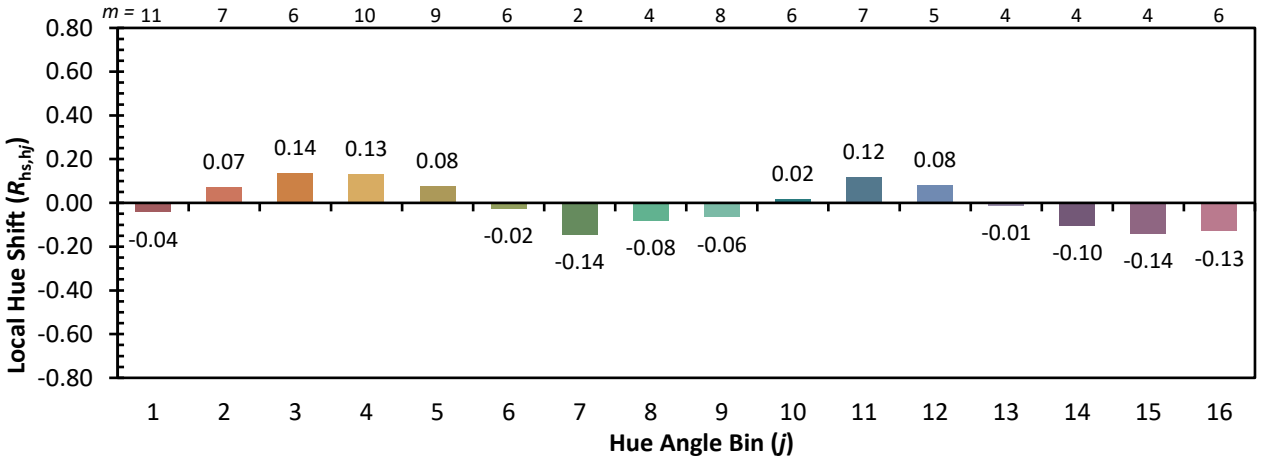


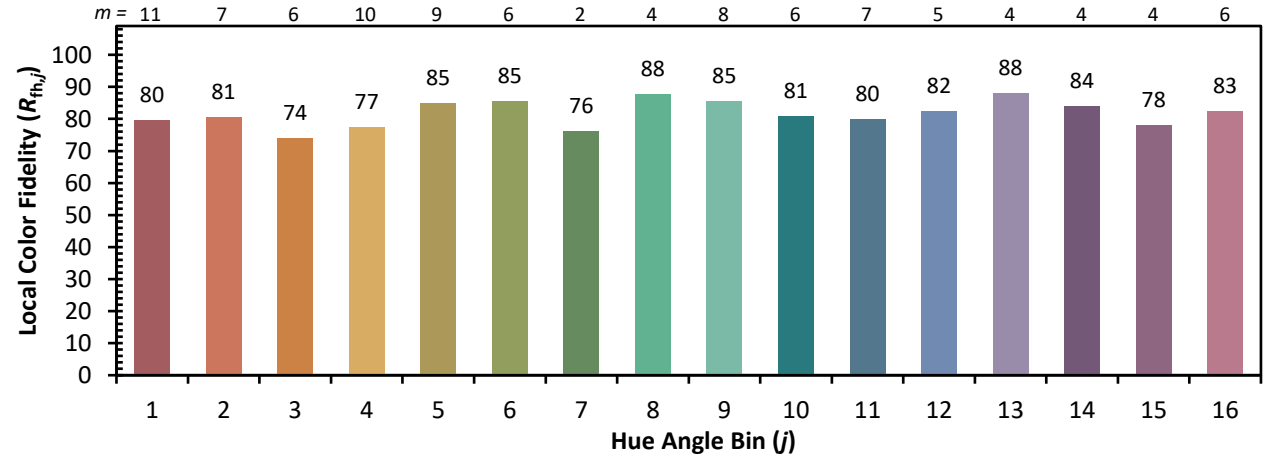
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



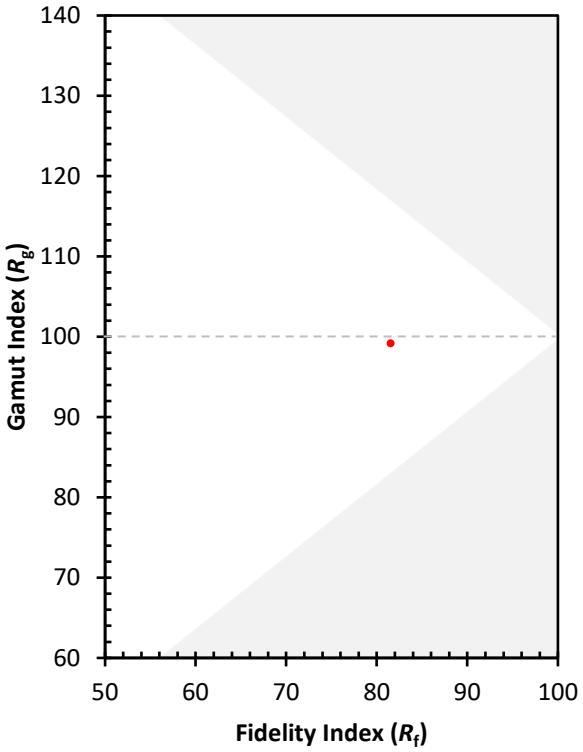


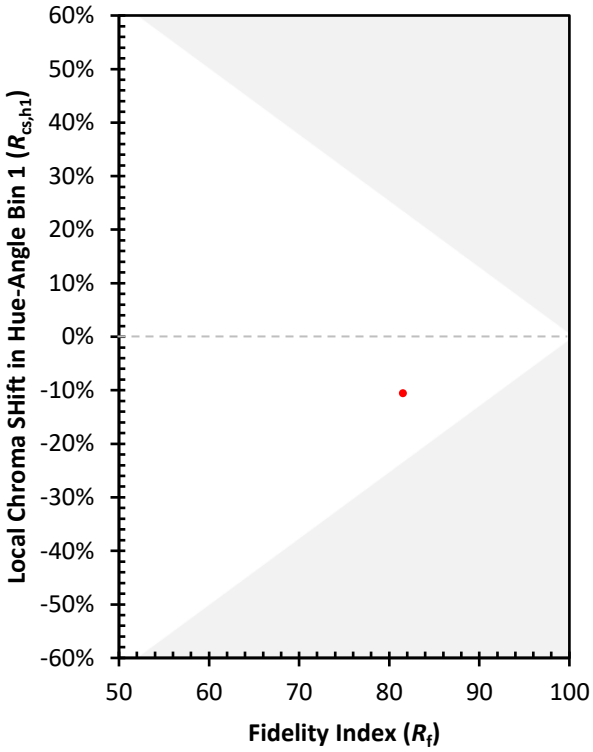


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)