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: P637488

Luminaire Tested: GWS-SA4C-830-U-SL4-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:	P637488
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-35)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4C-830-U-SL4-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	14809.6 lumens
Efficiency:	N/A
Efficacy:	115.2 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U0 - G3

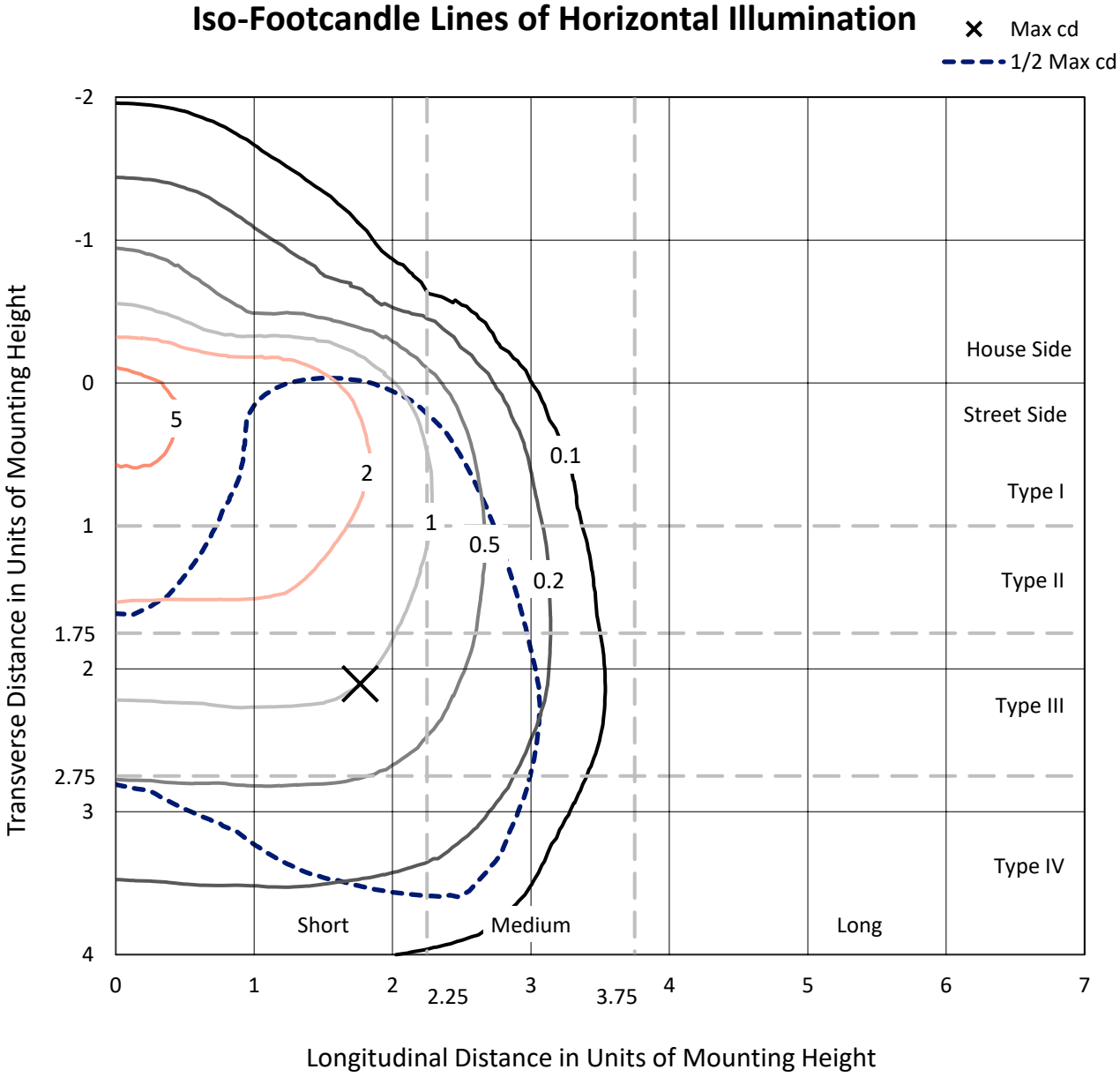
Input Watts (W):	128.5
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P637488
CATALOG NUMBER: GWS-SA4C-830-U-SL4-W

Iso-Footcandle Lines of Horizontal Illumination



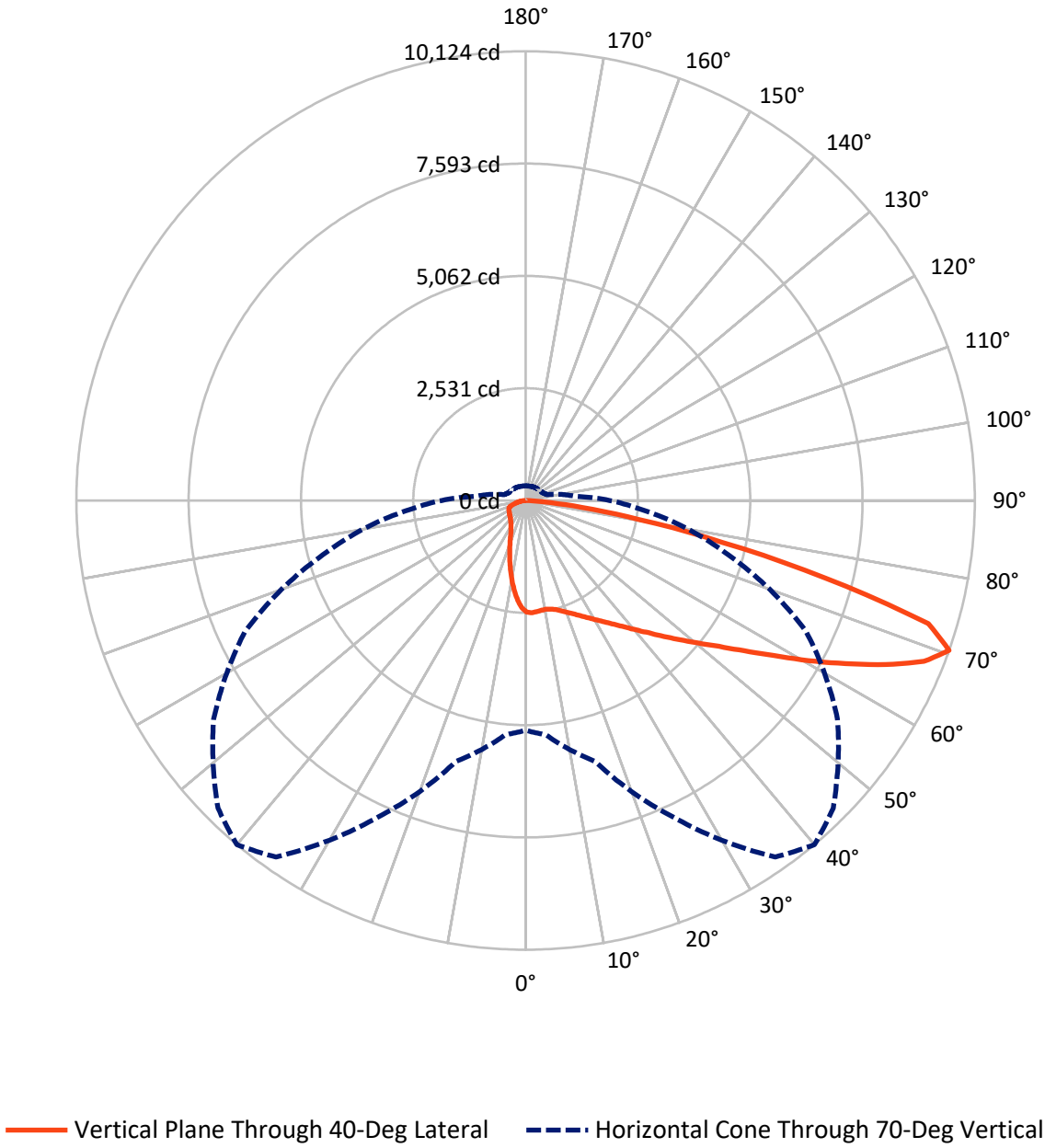
Based on 20 foot mounting height. Maximum calculated value = 6.3 fc
Type IV - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P637488
CATALOG NUMBER: GWS-SA4C-830-U-SL4-W

Luminous Intensity Polar Plot



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

Scaled Data Report

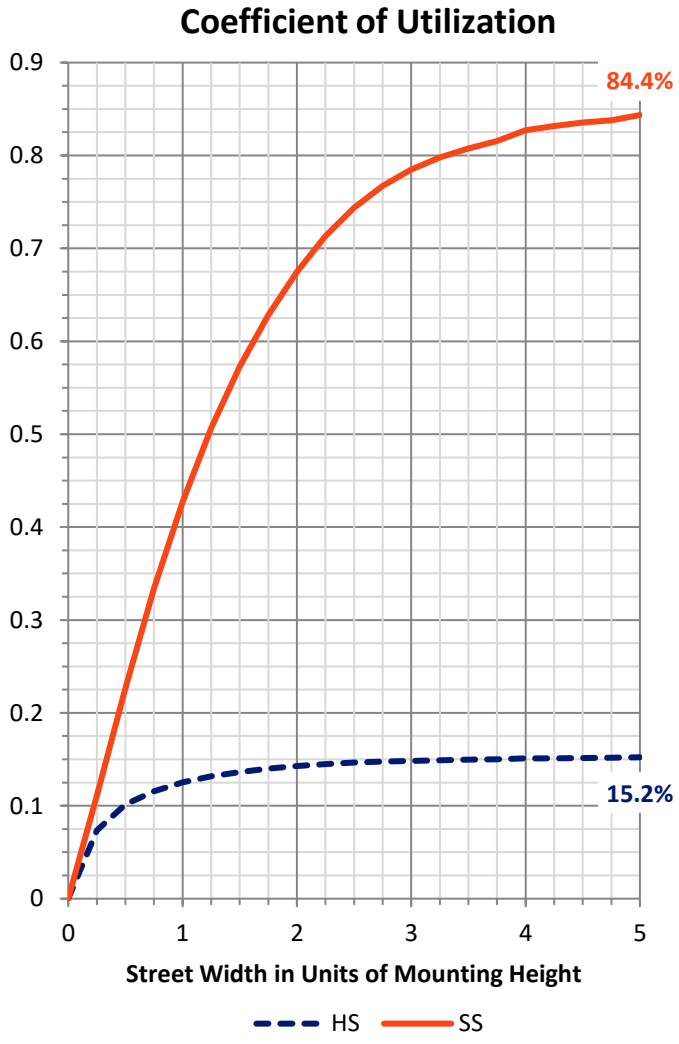
REPORT NUMBER: P637488
CATALOG NUMBER: GWS-SA4C-830-U-SL4-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2281.0	0.0	2281.0
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	12528.5	0.0	12528.5
	% Fixture	84.6	0.0	84.6
Total	Lumens	14809.6	0.0	14809.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.2	1.5
10°-20°	579.1	3.9
20°-30°	909.3	6.1
30°-40°	1367.1	9.2
40°-50°	2110.2	14.2
50°-60°	3133.8	21.2
60°-70°	3950.1	26.7
70°-80°	2284.3	15.4
80°-90°	253.5	1.7
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°	14809.6	100.0
0°-180°	14809.6	100.0



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

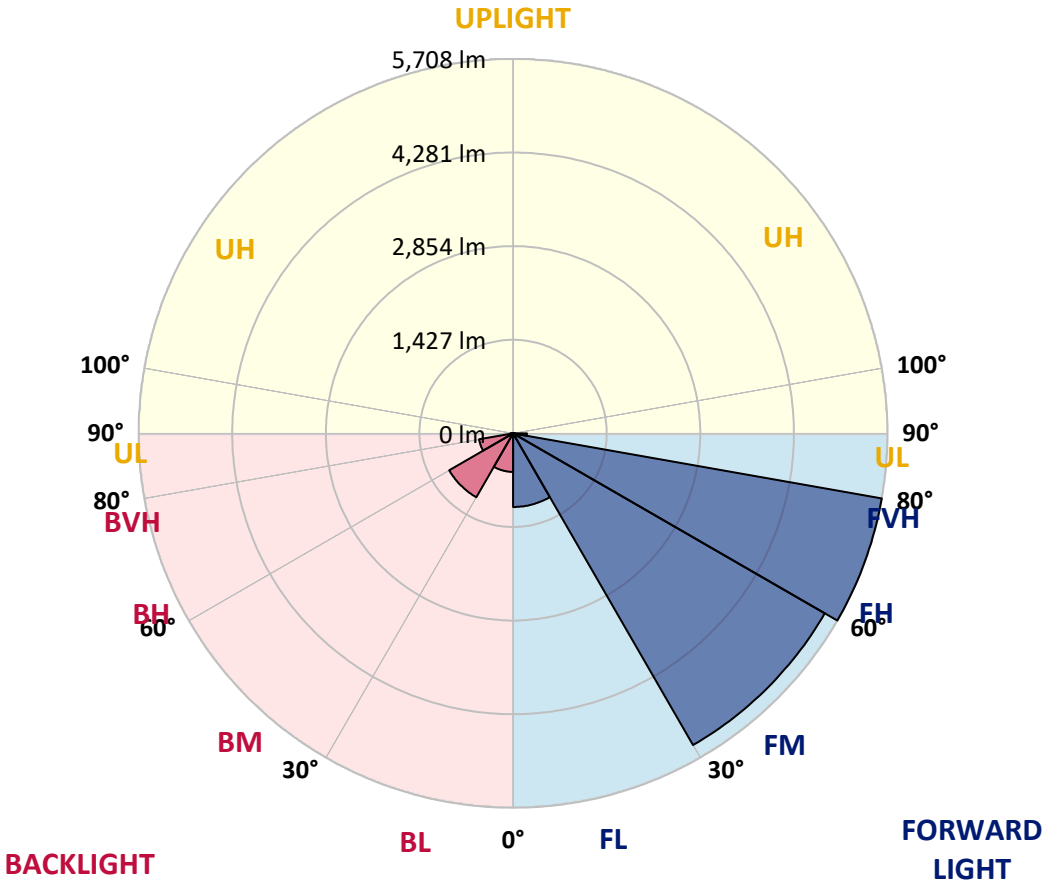
Scaled Data Report

REPORT NUMBER: P637488
CATALOG NUMBER: GWS-SA4C-830-U-SL4-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1122.7	7.6			
FM	(30°-60°)	5486.8	37.0			
FH	(60°-80°)	5708.0	38.5			G3/7500
FVH	(80°-90°)	211.1	1.4			G2/225
BL	(0°-30°)	587.9	4.0	B2/1000		
BM	(30°-60°)	1124.4	7.6	B2/2500		
BH	(60°-80°)	526.5	3.6	B2/1000		G2/1000
BVH	(80°-90°)	42.4	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-G3
Type IV Short



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

Scaled Data Report

REPORT NUMBER: P637488
CATALOG NUMBER: GWS-SA4C-830-U-SL4-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2514.8	2514.8	2514.8	2514.8	2514.8	*2514.8*	2514.8	2514.8	2514.8	2514.8	2514.8
2.5°	2530.3	2534.7	2538.1	2542.5	2540.3	*2533.6*	2539.2	2539.2	2527.0	2513.7	2501.6
5°	2533.6	2539.2	2538.1	2536.9	2528.1	*2517.1*	2517.1	2510.4	2489.4	2468.4	2448.5
7.5°	2527.0	2525.9	2524.8	2521.5	2511.5	*2499.4*	2497.2	2483.9	2456.3	2427.5	2398.8
10°	2497.2	2496.0	2499.4	2507.1	2504.9	*2493.8*	2493.8	2481.7	2449.6	2414.2	2376.7
12.5°	2472.8	2472.8	2486.1	2507.1	2514.8	*2510.4*	2511.5	2502.7	2466.2	2424.2	2380.0
15°	2476.2	2477.3	2506.0	2540.3	2554.6	*2551.3*	2552.4	2542.5	2501.6	2459.6	2399.9
17.5°	2498.3	2503.8	2553.5	2601.1	2619.9	*2615.4*	2607.7	2591.1	2544.7	2497.2	2424.2
20°	2544.7	2553.5	2617.6	2677.3	2699.4	*2689.5*	2676.2	2643.1	2592.2	2540.3	2450.7
22.5°	2636.4	2642.0	2712.7	2771.3	2789.0	*2776.8*	2750.3	2702.8	2644.2	2590.0	2482.8
25°	2765.8	2772.4	2839.8	2894.0	2889.6	*2875.2*	2838.7	2780.1	2710.5	2653.0	2529.2
27.5°	2919.4	2930.5	2996.8	3039.9	3011.2	*2990.2*	2949.3	2878.5	2800.0	2748.1	2600.0
30°	3087.4	3091.9	3148.2	3191.4	3147.1	*3118.4*	3068.7	2992.4	2921.6	2882.9	2706.1
32.5°	3249.9	3254.4	3303.0	3327.3	3280.9	*3259.9*	3216.8	3136.1	3086.3	3065.3	2864.2
35°	3421.3	3420.2	3460.0	3481.0	3433.4	*3424.6*	3380.4	3318.5	3309.6	3337.3	3095.2
37.5°	3592.6	3582.7	3603.7	3631.3	3604.8	*3613.6*	3584.9	3563.9	3598.2	3670.0	3402.5
40°	3729.7	3729.7	3751.8	3786.1	3794.9	*3833.6*	3817.0	3844.7	3955.2	4126.5	3782.8
42.5°	3851.3	3852.4	3898.8	3951.9	4016.0	*4075.7*	4089.0	4160.8	4389.6	4658.3	4260.3
45°	3978.4	3979.5	4042.5	4119.9	4255.9	*4369.7*	4396.3	4557.7	4884.9	5212.1	4778.7
47.5°	4125.4	4113.3	4200.6	4329.9	4523.4	*4687.0*	4755.5	4984.4	5397.8	5800.2	5267.3
50°	4291.3	4265.8	4363.1	4586.4	4825.2	*5049.6*	5164.5	5426.5	5948.3	6342.9	5727.2
52.5°	4478.1	4463.7	4565.4	4837.3	5202.1	*5460.8*	5616.7	5960.4	6483.3	6883.5	6092.0
55°	4710.2	4675.9	4823.0	5169.0	5644.3	*5973.7*	6158.3	6488.8	7068.1	7374.3	6370.6
57.5°	4964.5	4926.9	5123.6	5583.5	6219.1	*6580.6*	6811.6	7083.6	7618.6	7750.1	6534.2
60°	5238.6	5226.4	5459.7	6069.9	6904.5	*7324.5*	7491.5	7738.0	8097.2	7967.9	6493.3
62.5°	5489.5	5485.1	5824.5	6597.2	7630.7	*8092.8*	8225.5	8290.7	8442.1	7953.5	6168.3
65°	5753.7	5791.3	6250.1	7208.5	8463.1	*8916.4*	8971.6	8805.8	8558.2	7576.6	5502.8
67.5°	5786.9	5859.9	6517.6	7781.1	9252.4	*9680.2*	9636.0	9001.5	8215.5	6527.5	4313.4
70°	*5175.6*	*5302.7*	*6090.9*	*7868.4*	*9808.4*	*10123.5*	*9804.0*	*8580.3*	*6971.9*	*4729.0*	*2712.7*
72.5°	4324.4	4433.9	5130.3	6709.9	9091.0	*9492.3*	9060.1	7262.6	4926.9	2712.7	1381.8
75°	3366.0	3493.1	4135.4	5333.7	6806.1	*6966.4*	6749.7	5065.1	2708.3	1118.7	627.9
77.5°	2053.9	2145.6	2645.3	3613.6	4762.2	*4522.3*	3832.5	2839.8	1188.3	536.1	388.0
80°	908.7	965.0	1303.3	1941.1	2751.4	*2601.1*	2050.6	1212.7	650.0	340.5	270.8
82.5°	487.5	524.0	642.3	768.3	1208.2	*1263.5*	1024.7	698.6	349.3	194.6	154.8
85°	214.5	235.5	291.8	278.6	396.8	*390.2*	393.5	479.8	166.9	89.5	100.6
87.5°	0.0	0.0	0.0	0.0	1.1	*1.1*	12.2	64.1	16.6	26.5	23.2
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: P637488
CATALOG NUMBER: GWS-SA4C-830-U-SL4-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2514.8	2514.8	2514.8	2514.8	2514.8	2514.8	2514.8	2514.8	2514.8	2514.8	2514.8
2.5°	2488.3	2468.4	2462.9	2456.3	2444.1	2423.1	2407.6	2389.9	2382.2	2373.3	2374.5
5°	2426.4	2402.1	2378.9	2349.0	2311.4	2269.4	2240.7	2207.5	2189.8	2173.3	2177.7
7.5°	2373.3	2335.8	2288.2	2225.2	2157.8	2082.6	2021.8	1974.3	1942.2	1920.1	1931.2
10°	2340.2	2296.0	2213.1	2110.3	1996.4	1881.4	1794.1	1712.3	1661.5	1621.7	1619.4
12.5°	2333.6	2276.1	2155.6	2006.3	1841.6	1688.0	1559.8	1449.2	1381.8	1332.0	1350.8
15°	2340.2	2267.2	2105.8	1910.2	1702.4	1494.5	1335.4	1208.2	1127.5	1082.2	1078.9
17.5°	2347.9	2258.4	2049.5	1806.3	1556.4	1318.8	1134.2	999.3	916.4	871.1	872.2
20°	2354.6	2245.1	1983.1	1692.4	1408.3	1155.2	963.9	835.7	761.6	728.5	734.0
22.5°	2365.6	2231.9	1912.4	1570.8	1256.9	997.1	829.1	725.2	680.9	658.8	659.9
25°	2386.6	2224.1	1839.4	1438.2	1107.6	871.1	736.2	666.6	638.9	625.7	624.6
27.5°	2429.7	2230.7	1763.2	1309.9	972.8	774.9	676.5	631.2	612.4	603.6	602.5
30°	2501.6	2257.3	1696.8	1179.5	856.7	699.7	635.6	608.0	596.9	589.2	588.1
32.5°	2611.0	2307.0	1625.0	1057.9	762.7	644.5	603.6	589.2	581.5	577.0	577.0
35°	2776.8	2397.7	1554.2	951.8	689.8	601.4	578.1	572.6	566.0	563.8	566.0
37.5°	3015.6	2542.5	1490.1	858.9	637.8	568.2	550.5	552.7	547.2	550.5	553.8
40°	3318.5	2735.9	1435.9	782.6	599.1	543.9	526.2	533.9	530.6	533.9	539.4
42.5°	3702.1	2975.8	1395.0	722.9	571.5	524.0	507.4	515.1	512.9	517.3	522.9
45°	4129.9	3292.0	1376.3	680.9	551.6	509.6	491.9	497.4	495.2	498.5	504.1
47.5°	4540.0	3579.4	1392.8	656.6	535.0	497.4	478.6	480.9	479.8	478.6	482.0
50°	4893.7	3808.2	1440.4	648.9	524.0	485.3	467.6	468.7	465.4	458.8	461.0
52.5°	5182.2	3991.7	1469.1	648.9	518.4	472.0	455.4	456.5	449.9	441.1	442.2
55°	5372.4	4065.7	1445.9	647.8	516.2	461.0	443.3	444.4	437.7	426.7	427.8
57.5°	5426.5	3993.9	1348.6	635.6	514.0	452.1	431.1	433.3	428.9	416.7	416.7
60°	5275.1	3730.8	1170.6	608.0	508.5	446.6	422.3	425.6	423.4	411.2	411.2
62.5°	4878.2	3263.2	958.4	566.0	493.0	440.0	414.5	421.2	426.7	420.1	419.0
65°	4135.4	2614.3	779.3	519.5	473.1	428.9	403.5	420.1	432.2	441.1	441.1
67.5°	3102.9	1871.5	635.6	470.9	443.3	406.8	389.1	404.6	413.4	419.0	422.3
70°	*1891.4*	*1101.0*	*500.8*	*414.5*	*400.2*	*373.6*	*360.4*	*344.9*	*332.7*	*330.5*	*331.6*
72.5°	925.2	630.1	406.8	352.6	341.6	317.3	287.4	280.8	275.3	271.9	270.8
75°	509.6	438.9	336.0	292.9	273.0	243.2	236.6	225.5	223.3	218.9	220.0
77.5°	360.4	346.0	277.5	237.7	207.8	192.3	195.7	187.9	187.9	184.6	183.5
80°	270.8	271.9	213.3	173.6	153.7	148.1	151.4	151.4	149.2	148.1	147.0
82.5°	171.3	193.4	143.7	111.6	109.4	110.5	109.4	108.3	110.5	107.2	106.1
85°	118.3	139.3	87.3	66.3	66.3	65.2	67.4	66.3	68.5	65.2	65.2
87.5°	26.5	61.9	32.1	19.9	21.0	19.9	21.0	22.1	24.3	25.4	25.4
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

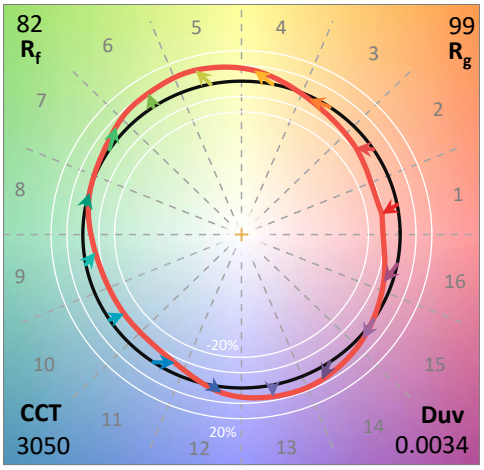
Test Information

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

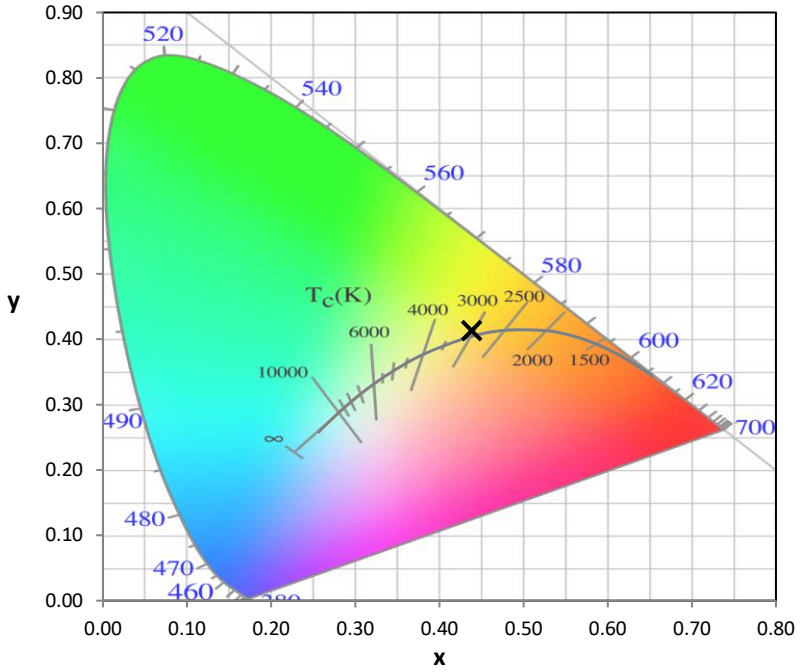
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

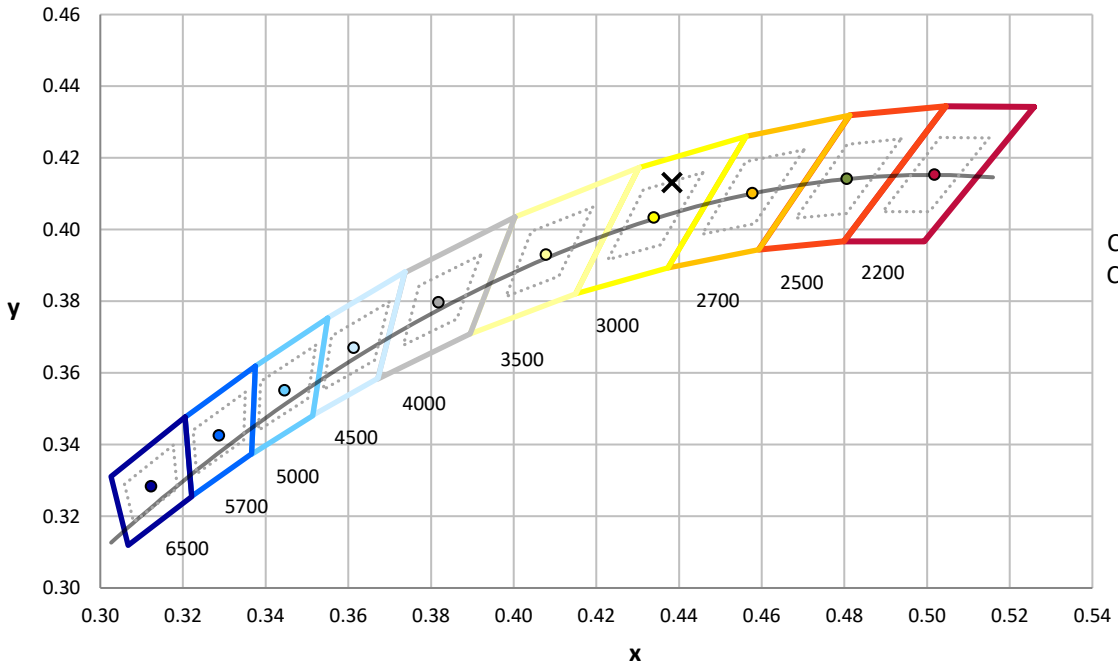
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

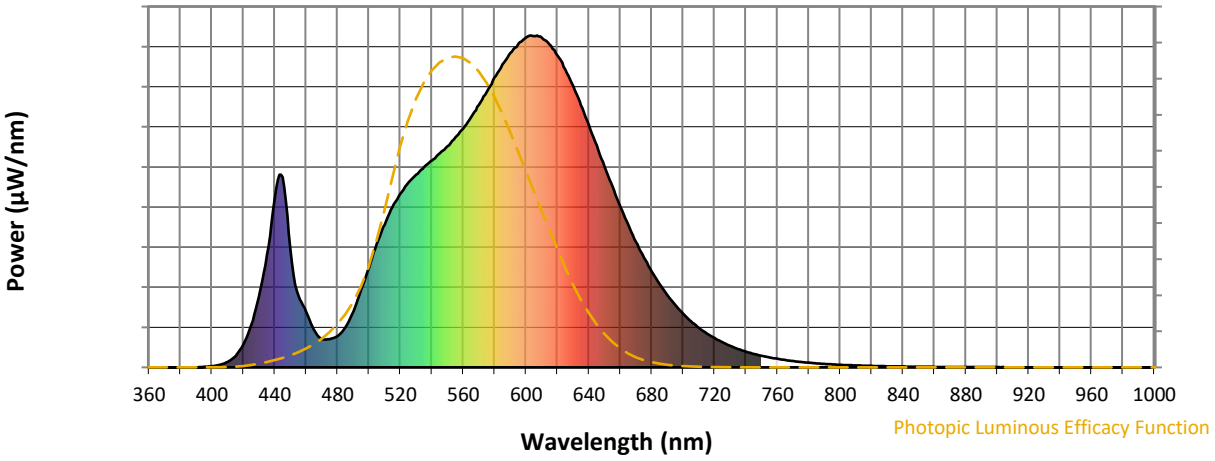


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

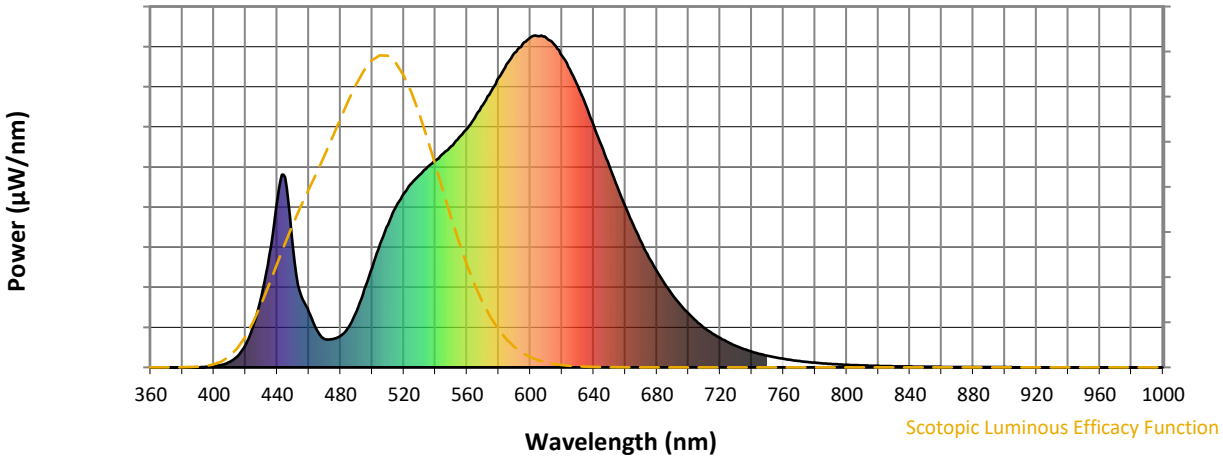


Photopic Lumens: NR

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

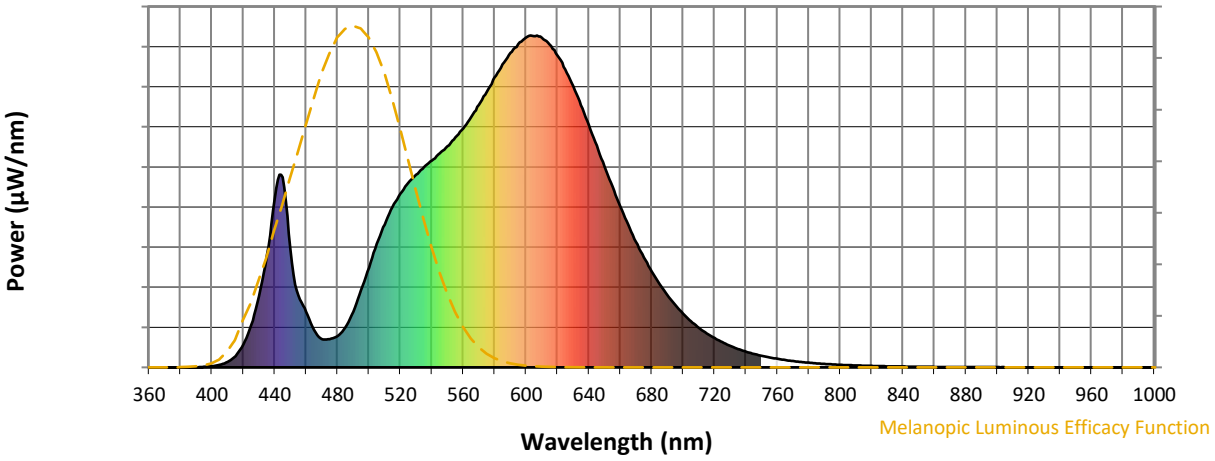


Scotopic Lumens: NR **S/P: 1.27**

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			

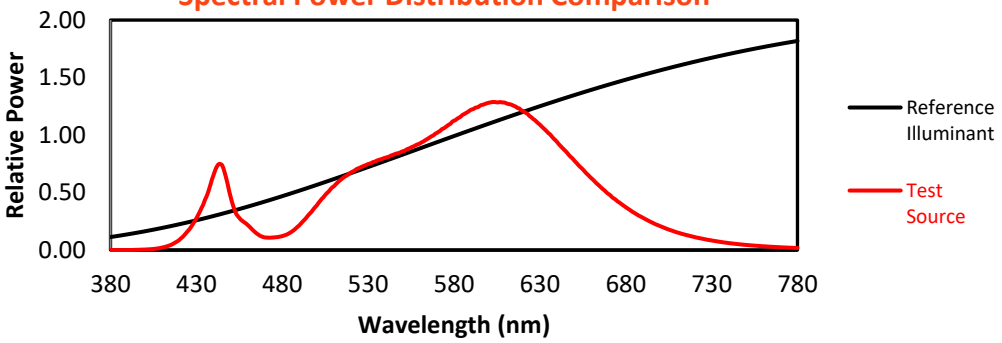
REPORT NUMBER: SP1-2408-195-9

TM-30-18

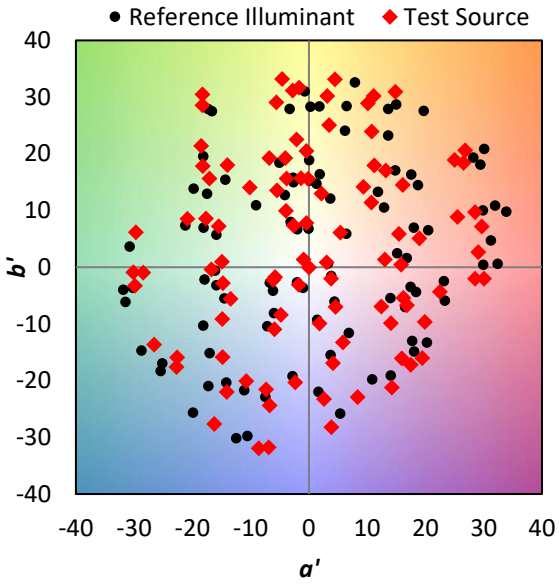
Summary

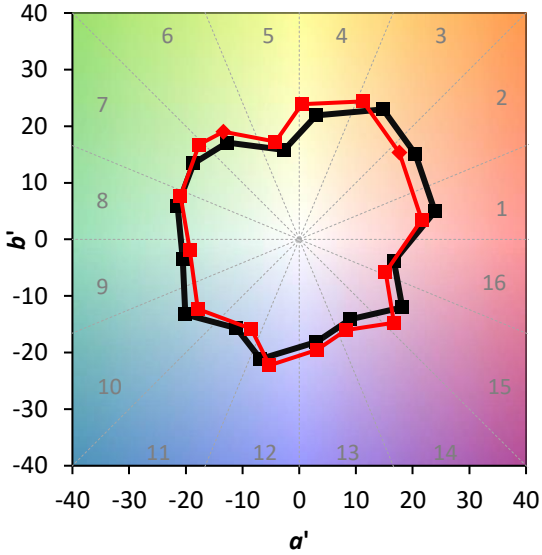
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

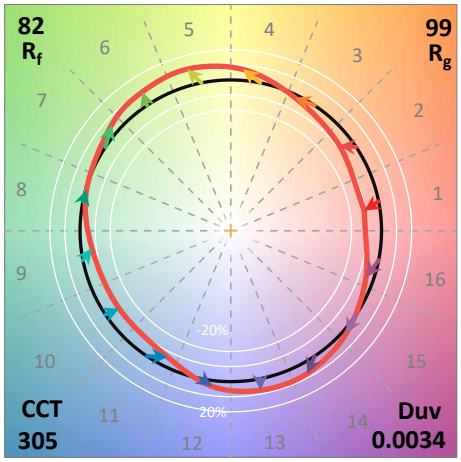
Spectral Power Distribution Comparison

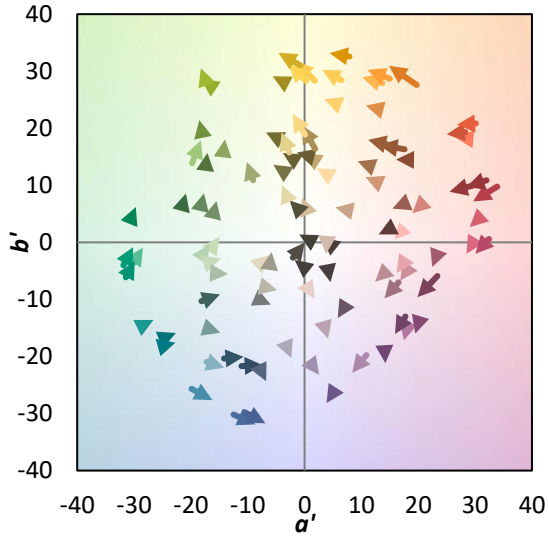


Color Vector Graphics







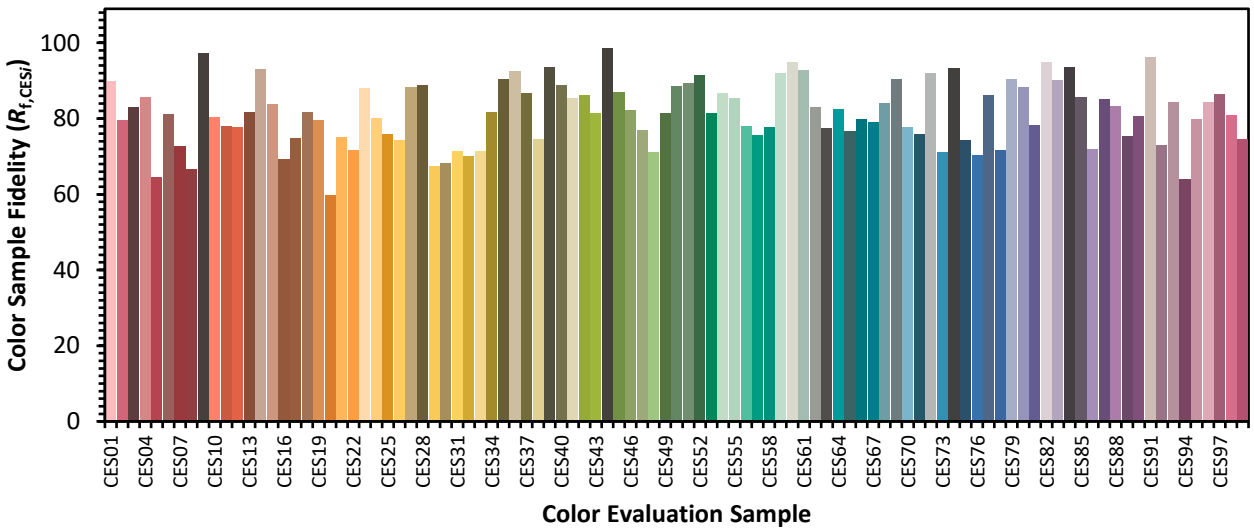


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

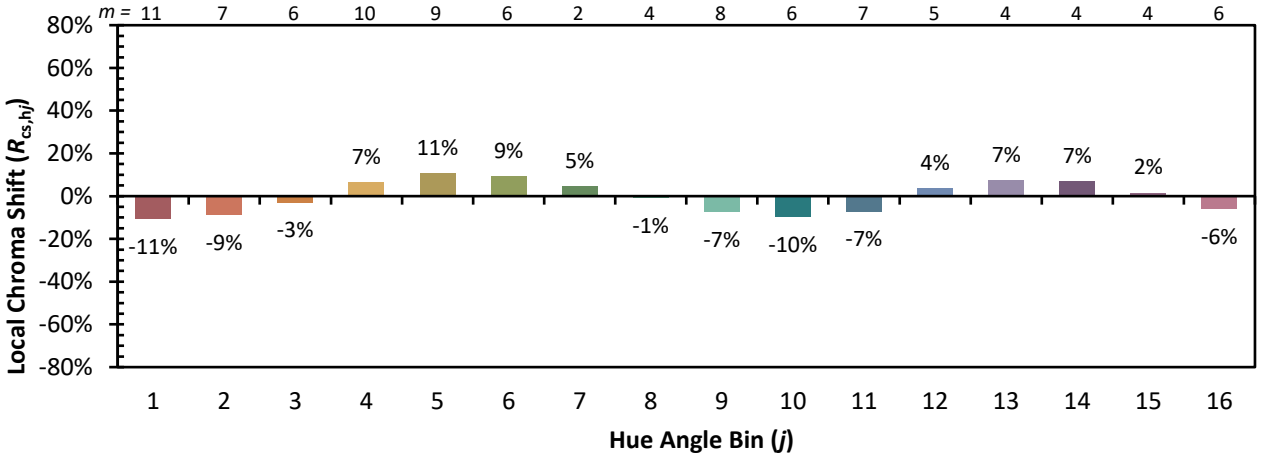
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

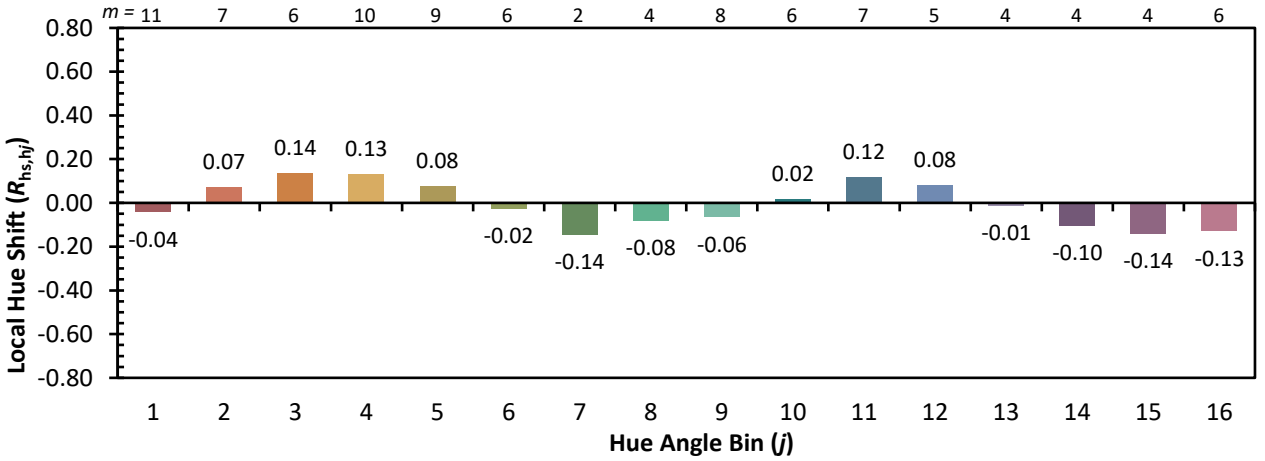


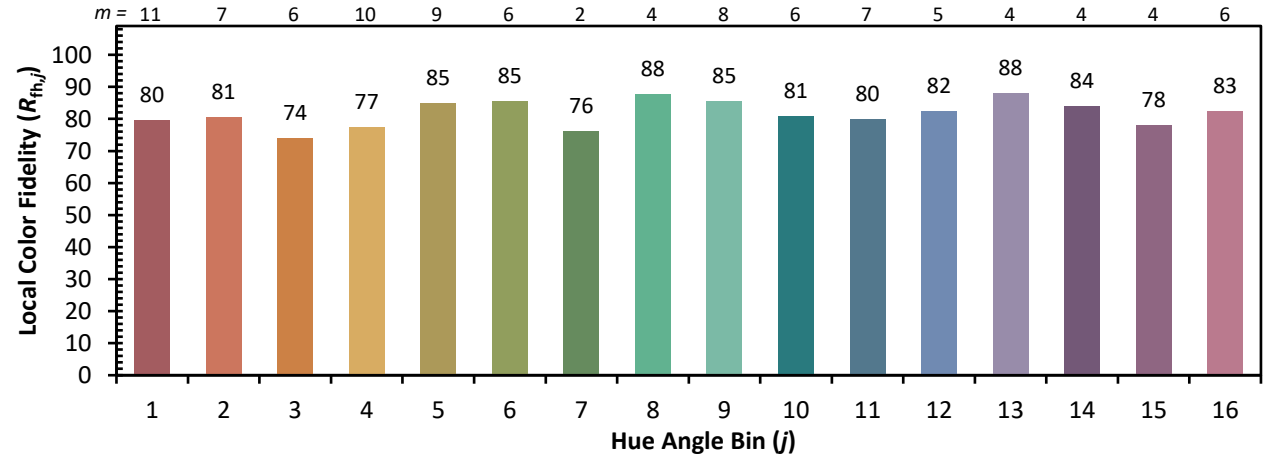
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



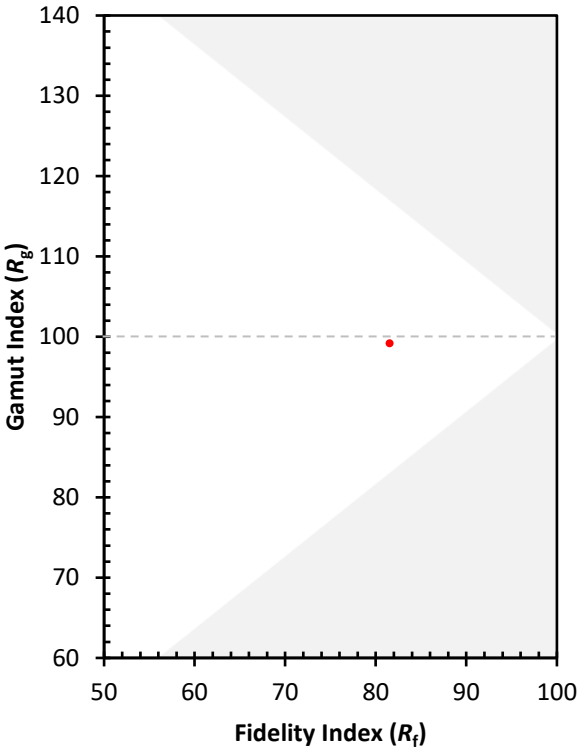


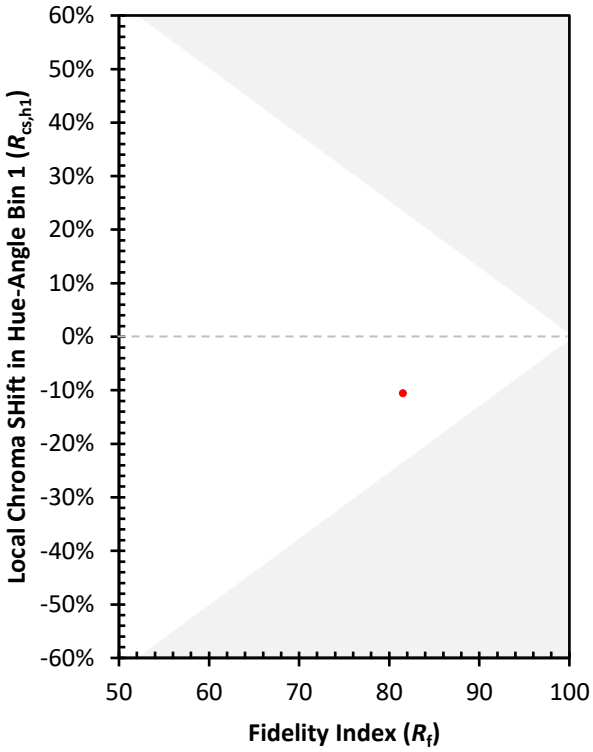


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)