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: P637973

Luminaire Tested: GWS-SA4D-830-U-RW-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:	P637973
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4D-830-U-RW-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	20026.2 lumens
Efficiency:	N/A
Efficacy:	123.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B4 - U0 - G4

Input Watts (W):	162.1
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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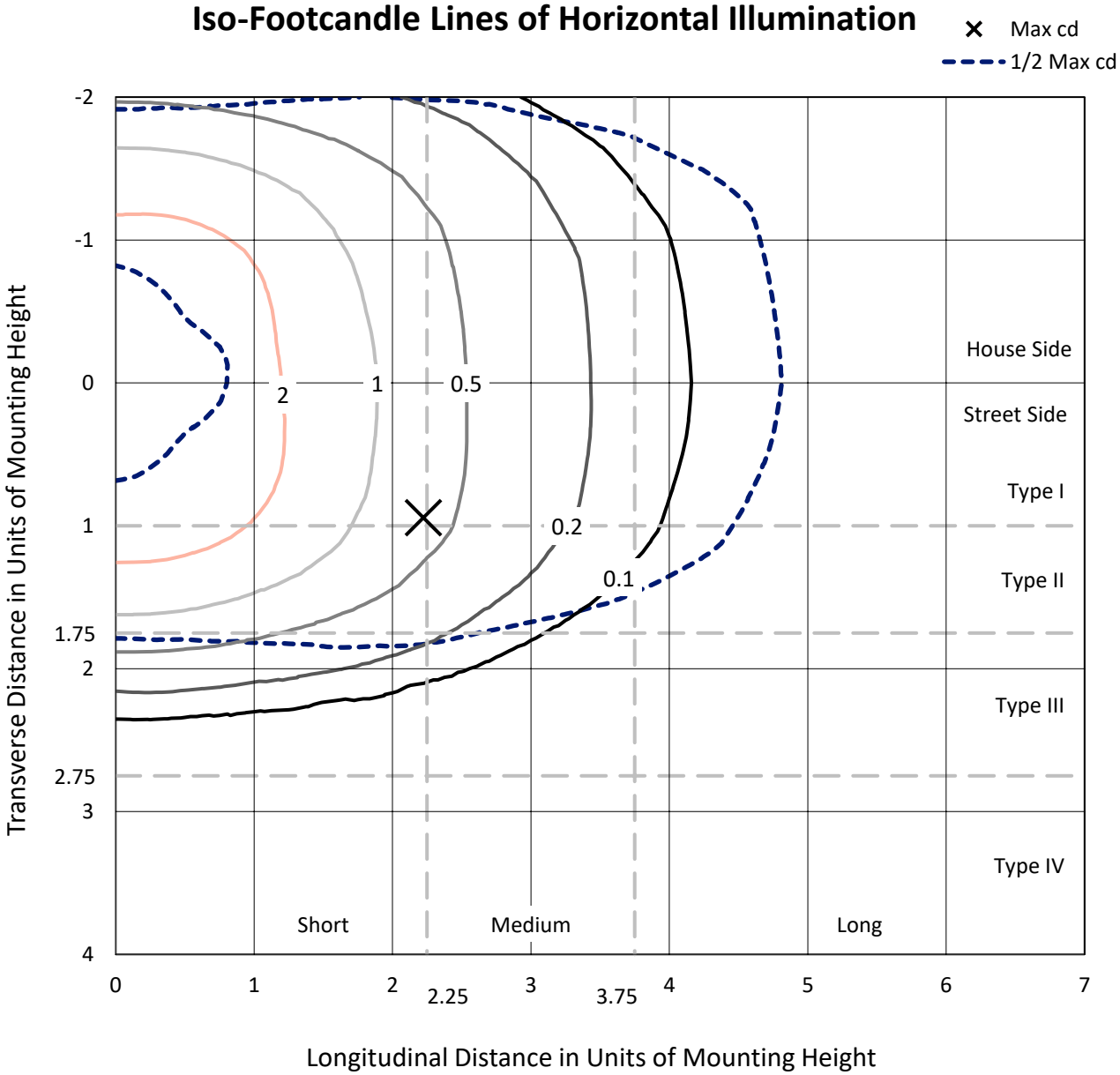
Scaled Data Report

REPORT NUMBER: P637973
CATALOG NUMBER: GWS-SA4D-830-U-RW-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
Type III - Short - N/A

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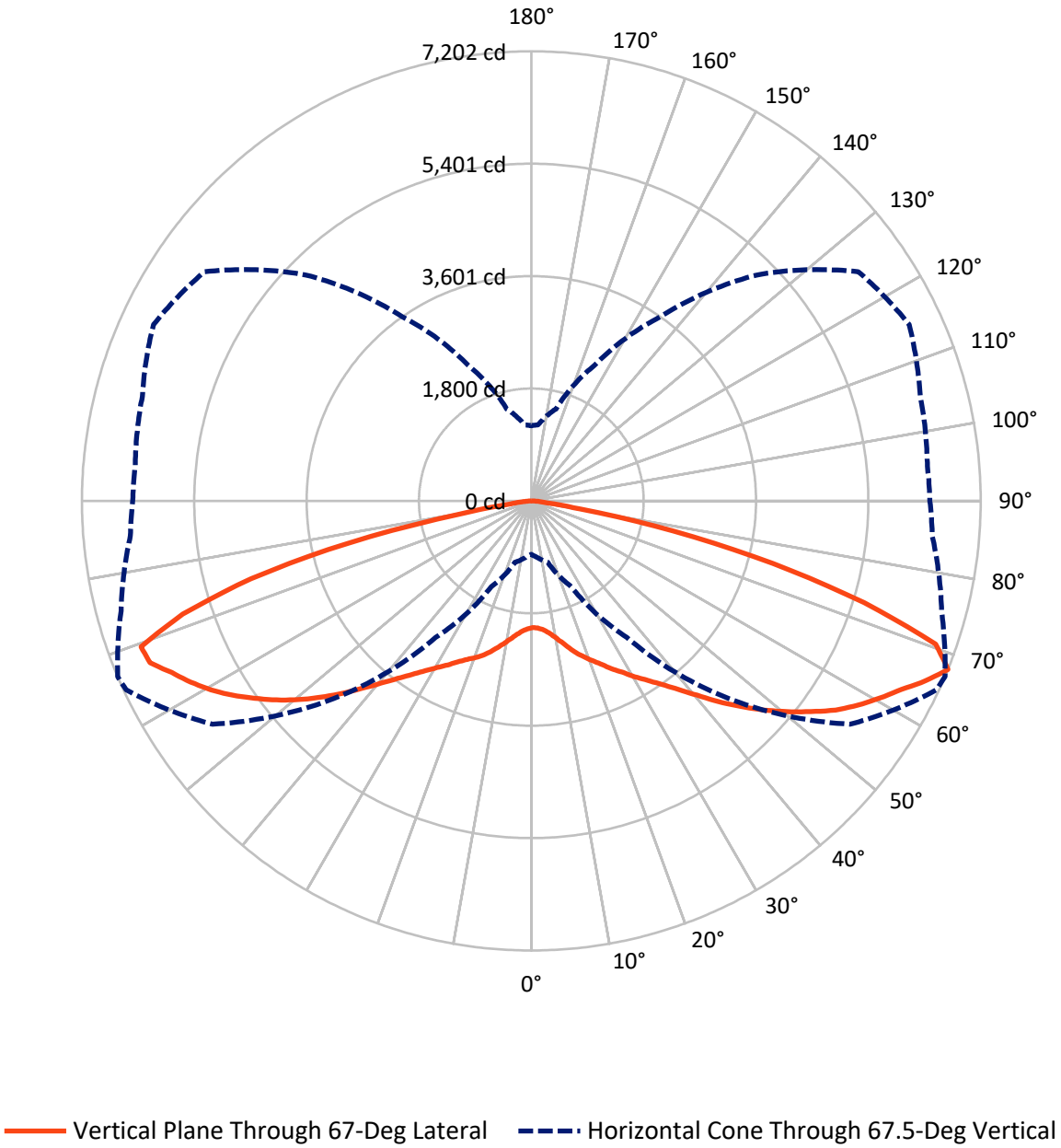
Luminous Intensity Polar Plot



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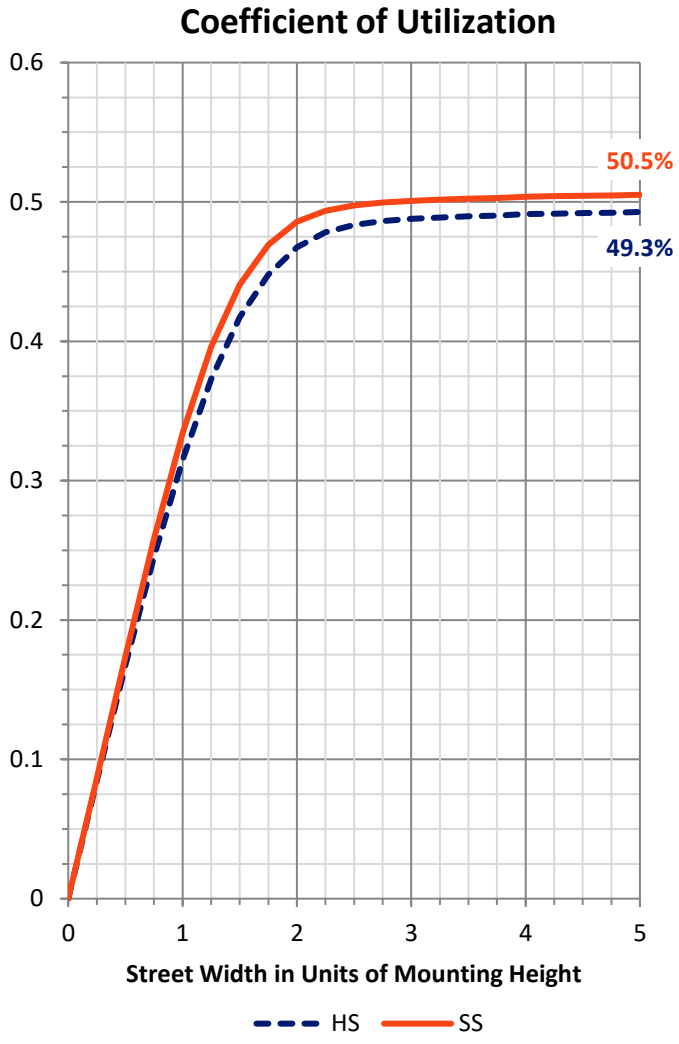
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9902.6	0.0	9902.6
	% Fixture	49.4	0.0	49.4
Street Side	Lumens	10123.6	0.0	10123.6
	% Fixture	50.6	0.0	50.6
Total	Lumens	20026.2	0.0	20026.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.0	1.0
10°-20°	672.1	3.4
20°-30°	1318.7	6.6
30°-40°	2246.6	11.2
40°-50°	3607.7	18.0
50°-60°	4902.0	24.5
60°-70°	4689.1	23.4
70°-80°	2229.4	11.1
80°-90°	161.6	0.8
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°	20026.2	100.0
0°-180°	20026.2	100.0



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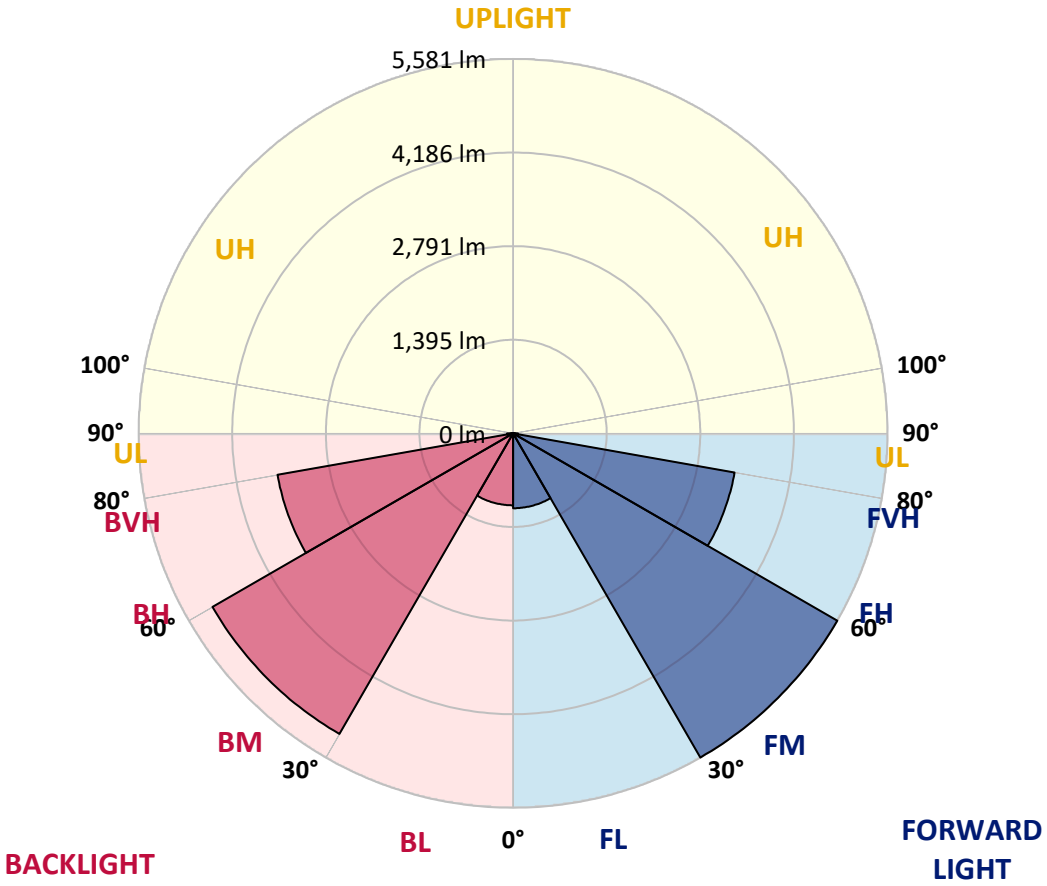
REPORT NUMBER: P637973
CATALOG NUMBER: GWS-SA4D-830-U-RW-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1116.6	5.6			
FM	(30°-60°)	5581.5	27.9			
FH	(60°-80°)	3352.9	16.7			G2/5000
FVH	(80°-90°)	72.6	0.4			G1/100
BL	(0°-30°)	1073.2	5.4	B3/2500		
BM	(30°-60°)	5174.9	25.8	B4/8500		
BH	(60°-80°)	3565.6	17.8	B4/5000		G4/5000
BVH	(80°-90°)	88.9	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
Type III Short



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REPORT NUMBER: P637973
CATALOG NUMBER: GWS-SA4D-830-U-RW-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2027.8	2027.8	2027.8	2027.8	2027.8	2027.8	2027.8	2027.8	*2027.8*	2027.8	2027.8
2.5°	1985.9	1988.7	1992.9	2001.3	2009.6	2022.2	2034.7	2033.3	*2038.9*	2043.1	2047.3
5°	1974.8	1977.6	1984.5	1995.7	2008.2	2029.2	2055.7	2066.8	*2075.2*	2090.5	2104.5
7.5°	1998.5	2004.1	2013.8	2029.2	2048.7	2075.2	2111.4	2131.0	*2143.5*	2171.4	2195.1
10°	2030.6	2037.5	2057.1	2086.3	2115.6	2156.1	2202.1	2231.4	*2239.7*	2276.0	2320.6
12.5°	2061.2	2069.6	2101.7	2154.7	2207.7	2262.1	2316.4	2352.7	*2355.5*	2404.3	2454.5
15°	2110.0	2117.0	2160.3	2228.6	2309.5	2384.8	2451.7	2476.8	*2488.0*	2522.9	2585.6
17.5°	2217.4	2225.8	2281.6	2355.5	2440.6	2520.1	2587.0	2607.9	*2607.9*	2637.2	2688.8
20°	2333.2	2341.6	2415.5	2510.3	2613.5	2694.4	2746.0	2726.5	*2719.5*	2727.9	2764.1
22.5°	2462.9	2478.2	2549.3	2659.5	2786.4	2885.5	2911.9	2853.4	*2833.8*	2814.3	2822.7
25°	2628.8	2647.0	2716.7	2833.8	2958.0	3062.6	3077.9	2987.3	*2976.1*	2907.8	2882.7
27.5°	2819.9	2833.8	2920.3	3036.1	3151.8	3239.7	3256.4	3144.8	*3107.2*	3012.4	2953.8
30°	3066.7	3079.3	3154.6	3269.0	3369.4	3430.7	3451.7	3298.3	*3269.0*	3123.9	3033.3
32.5°	3335.9	3341.5	3418.2	3528.4	3617.6	3676.2	3646.9	3468.4	*3425.2*	3262.0	3137.9
35°	3644.1	3644.1	3743.1	3832.4	3903.5	3920.3	3864.5	3660.9	*3610.6*	3433.5	3278.7
37.5°	3946.7	3955.1	4047.2	4153.2	4215.9	4213.1	4111.3	3888.2	*3831.0*	3638.5	3467.0
40°	4274.5	4292.6	4384.7	4503.2	4563.2	4554.8	4398.6	4150.4	*4091.8*	3864.5	3697.1
42.5°	4575.7	4605.0	4712.4	4833.7	4899.3	4893.7	4730.5	4451.6	*4394.4*	4137.8	3970.5
45°	4815.6	4846.3	4980.2	5148.9	5253.5	5243.7	5079.2	4764.0	*4694.3*	4425.1	4241.0
47.5°	5026.2	5058.3	5207.5	5386.0	5551.9	5568.7	5418.1	5079.2	*5005.3*	4733.3	4525.5
50°	5188.0	5203.3	5370.6	5565.9	5758.3	5851.8	5720.7	5395.7	*5306.5*	5037.3	4803.0
52.5°	5175.4	5196.3	5402.7	5667.7	5925.7	6079.1	5988.5	5694.2	*5607.7*	5314.9	5086.1
55°	4920.2	4941.1	5186.6	5572.9	6019.1	6245.1	6235.3	5978.7	*5915.9*	5598.0	5380.4
57.5°	4547.8	4593.8	4837.9	5254.9	5896.4	6377.6	6416.6	6238.1	*6172.5*	5875.5	5671.9
60°	3881.2	3942.6	4224.3	4765.4	5503.1	6332.9	6610.5	6457.0	*6416.6*	6133.5	5935.5
62.5°	2819.9	2864.5	3239.7	3949.5	4920.2	6015.0	6773.6	6683.0	*6652.3*	6365.0	6173.9
65°	1688.9	1790.7	2091.9	2793.4	3969.1	5415.3	6684.4	6978.6	*6946.6*	6603.5	6377.6
67.5°	*854.9*	*900.9*	*1019.5*	*1514.5*	*2669.3*	*4480.9*	*6236.7*	*7162.7*	*7201.8*	*6807.1*	*6450.1*
70°	530.0	542.5	576.0	747.5	1333.2	2944.0	5100.1	6683.0	*6874.0*	6775.0	6261.8
72.5°	425.4	428.1	433.7	465.8	640.1	1376.5	3224.3	5234.0	*5578.4*	6327.4	5992.6
75°	352.8	354.2	355.6	365.4	398.9	562.0	1568.9	3596.7	*3999.7*	5377.6	5556.1
77.5°	283.1	276.1	281.7	285.9	294.3	313.8	541.1	1919.0	*2327.6*	3529.8	4296.8
80°	184.1	181.3	192.5	196.6	205.0	217.6	288.7	651.3	*790.7*	1284.4	1366.7
82.5°	99.0	93.4	117.1	113.0	117.1	126.9	170.1	238.5	*267.8*	387.7	327.7
85°	30.7	30.7	32.1	37.7	46.0	44.6	73.9	117.1	*129.7*	166.0	122.7
87.5°	5.6	5.6	5.6	5.6	5.6	7.0	15.3	23.7	*32.1*	57.2	43.2
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: P637973
CATALOG NUMBER: GWS-SA4D-830-U-RW-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2027.8	2027.8	2027.8	2027.8	2027.8	2027.8	2027.8	2027.8	2027.8	2027.8	2027.8
2.5°	2055.7	2043.1	2050.1	2054.3	2052.9	2050.1	2036.1	2033.3	2026.4	2015.2	2012.4
5°	2117.0	2103.1	2104.5	2100.3	2086.3	2068.2	2037.5	2022.2	2009.6	1995.7	1994.3
7.5°	2213.2	2197.9	2193.7	2174.2	2135.1	2093.3	2044.5	2016.6	1995.7	1977.6	1974.8
10°	2336.0	2320.6	2306.7	2260.7	2196.5	2140.7	2076.6	2036.1	2005.5	1983.1	1979.0
12.5°	2472.6	2460.1	2425.2	2358.3	2281.6	2216.0	2150.5	2100.3	2055.7	2022.2	2018.0
15°	2624.7	2596.8	2543.8	2457.3	2384.8	2331.8	2252.3	2184.0	2112.8	2068.2	2058.4
17.5°	2730.6	2706.9	2644.2	2560.5	2503.3	2457.3	2363.9	2266.2	2170.0	2104.5	2090.5
20°	2806.0	2780.9	2709.7	2648.4	2630.2	2591.2	2482.4	2369.4	2257.9	2177.0	2158.9
22.5°	2860.3	2833.8	2761.3	2730.6	2755.8	2748.8	2642.8	2514.5	2382.0	2285.8	2263.5
25°	2911.9	2886.8	2822.7	2833.8	2900.8	2921.7	2807.4	2658.1	2507.5	2394.5	2368.0
27.5°	2960.8	2928.7	2899.4	2960.8	3055.6	3094.6	2973.3	2804.6	2641.4	2525.6	2504.7
30°	3036.1	2998.4	2994.2	3083.5	3234.1	3267.6	3133.7	2964.9	2803.2	2686.0	2659.5
32.5°	3130.9	3096.0	3098.8	3232.7	3407.0	3434.9	3320.6	3163.0	3001.2	2884.1	2847.8
35°	3259.2	3216.0	3239.7	3404.2	3580.0	3631.6	3539.5	3408.4	3250.8	3130.9	3090.5
37.5°	3436.3	3373.6	3422.4	3595.3	3772.4	3849.1	3778.0	3680.4	3524.2	3402.9	3365.2
40°	3662.2	3610.6	3630.2	3821.2	4003.9	4096.0	4051.3	3955.1	3800.3	3673.4	3630.2
42.5°	3930.0	3878.4	3871.4	4075.1	4257.7	4397.2	4354.0	4266.1	4105.7	3960.7	3918.9
45°	4192.2	4144.8	4154.5	4362.3	4567.4	4719.4	4676.1	4572.9	4398.6	4231.2	4197.8
47.5°	4465.5	4426.5	4434.9	4655.2	4881.1	5033.2	4978.8	4853.2	4649.6	4471.1	4430.7
50°	4745.9	4701.2	4713.8	4945.3	5189.3	5333.0	5249.3	5063.8	4839.3	4665.0	4630.1
52.5°	5024.8	4971.8	5003.9	5222.8	5475.2	5589.6	5434.8	5210.3	4992.7	4819.8	4780.7
55°	5345.5	5289.8	5254.9	5489.2	5738.8	5786.2	5574.3	5312.1	5054.1	4857.4	4833.7
57.5°	5638.4	5591.0	5525.4	5759.7	5943.8	5909.0	5681.6	5284.2	4904.8	4652.4	4619.0
60°	5900.6	5860.2	5803.0	6002.4	6086.1	6008.0	5595.2	4953.7	4536.7	4273.1	4257.7
62.5°	6141.9	6098.6	6045.6	6215.8	6204.6	6023.3	5201.9	4446.0	3888.2	3605.1	3580.0
65°	6332.9	6293.9	6278.5	6412.4	6394.3	5723.5	4589.7	3614.8	2840.8	2521.5	2511.7
67.5°	*6387.3*	*6372.0*	*6454.3*	*6681.6*	*6398.5*	*5121.0*	*3599.5*	*2397.3*	*1525.7*	*1223.1*	*1204.9*
70°	6183.7	6182.3	6418.0	6742.9	5818.3	3911.9	2124.0	1080.8	767.0	680.6	669.4
72.5°	5918.7	5914.5	6101.4	5816.9	4314.9	2140.7	893.9	578.8	479.7	456.0	456.0
75°	5483.6	5472.5	5613.3	4425.1	2426.6	806.1	474.2	397.5	376.5	372.4	372.4
77.5°	4469.7	4376.3	4154.5	2734.8	846.5	396.1	313.8	312.4	299.8	298.4	298.4
80°	1469.9	1469.9	1708.4	1043.2	373.8	244.1	221.7	232.9	220.3	212.0	210.6
82.5°	239.9	330.5	470.0	298.4	202.2	152.0	136.7	145.0	152.0	121.3	121.3
85°	94.8	124.1	181.3	139.5	93.4	61.4	65.5	72.5	64.2	55.8	54.4
87.5°	36.3	44.6	64.2	33.5	19.5	11.2	7.0	7.0	5.6	5.6	5.6
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

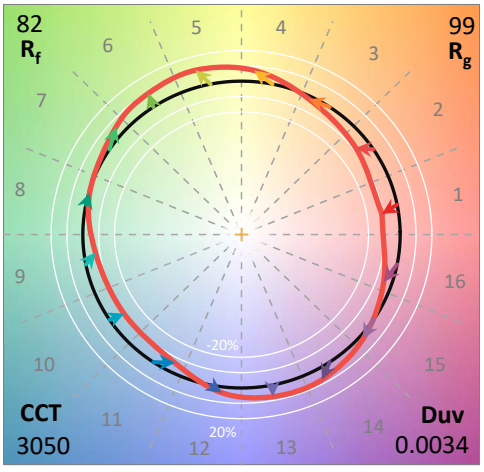
Test Information

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

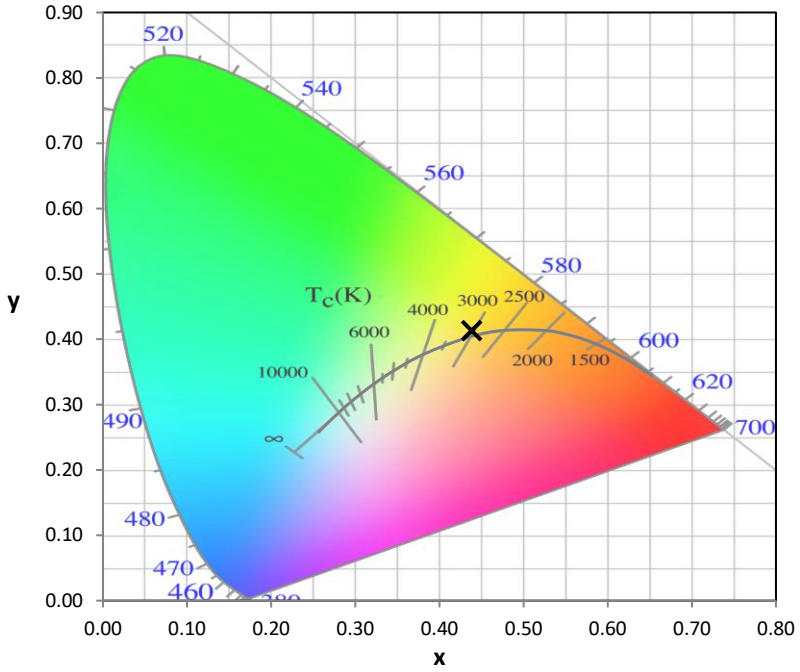
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

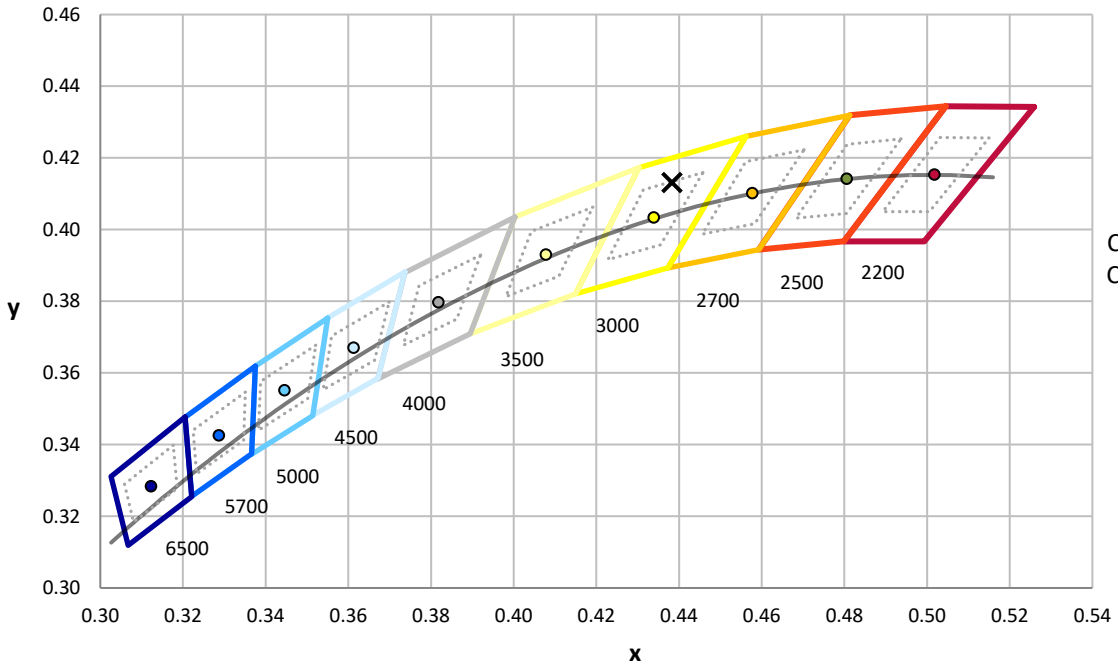
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

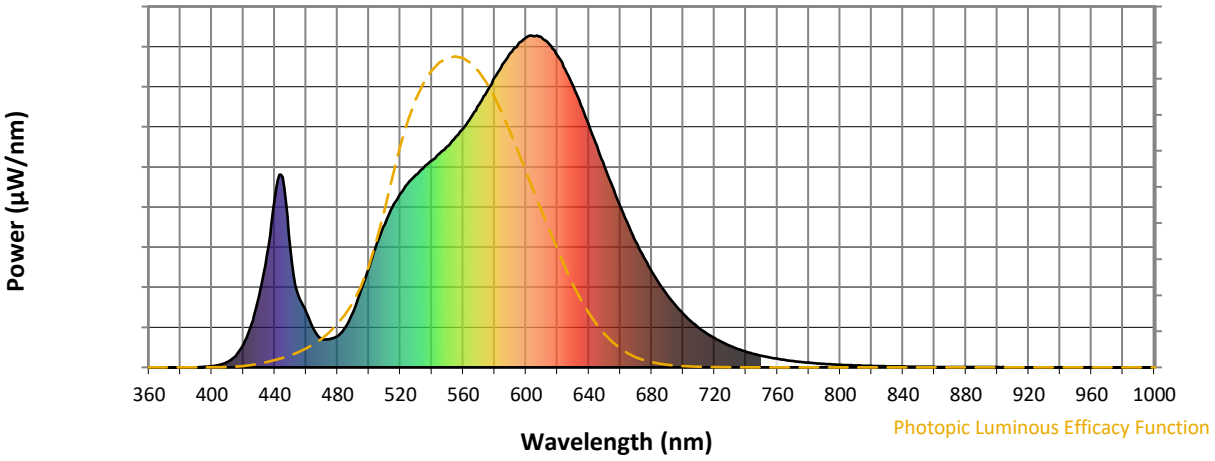


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

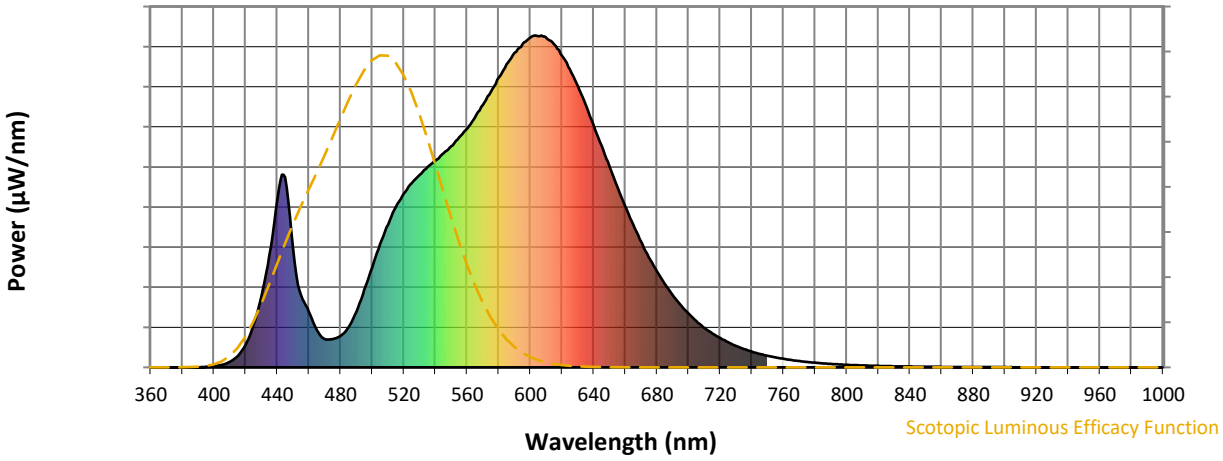


Photopic Lumens: NR

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

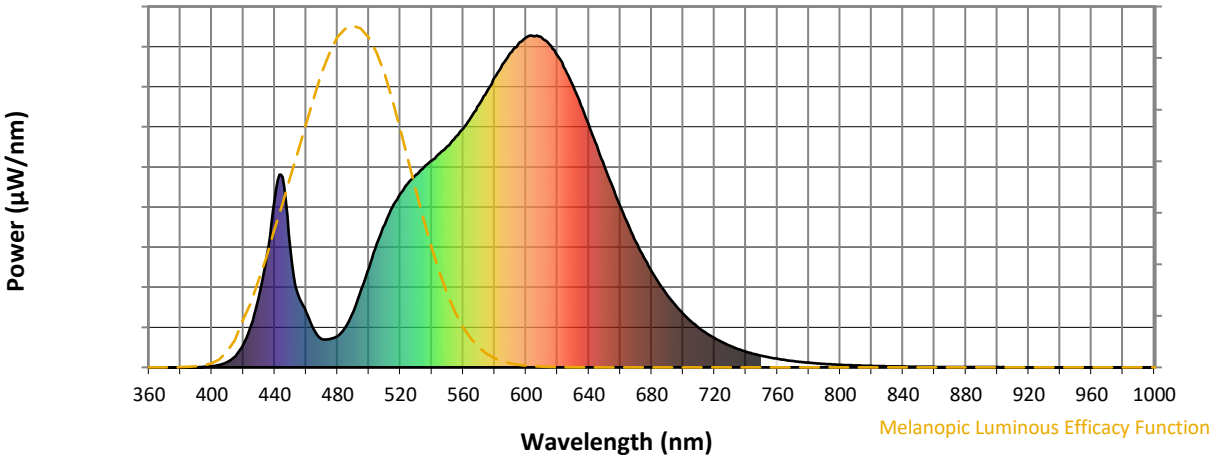


Scotopic Lumens: NR **S/P: 1.27**

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			

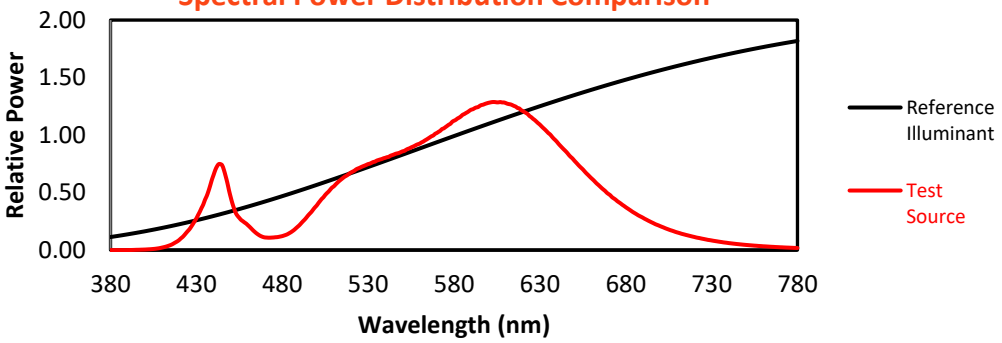
REPORT NUMBER: SP1-2408-195-9

TM-30-18

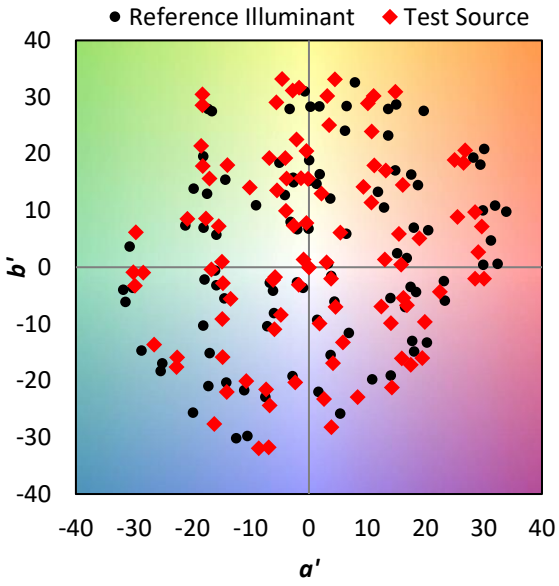
Summary

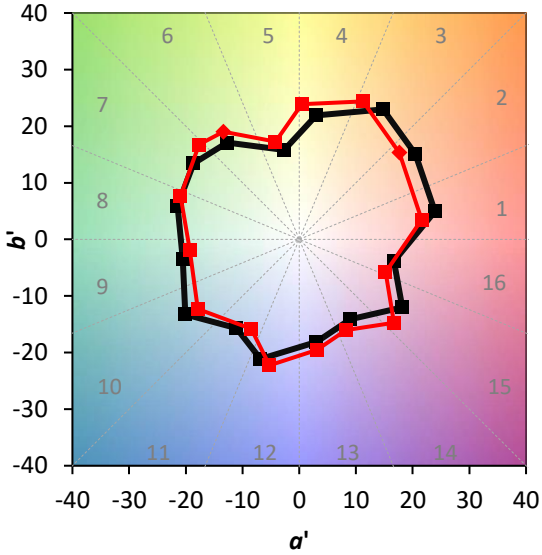
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

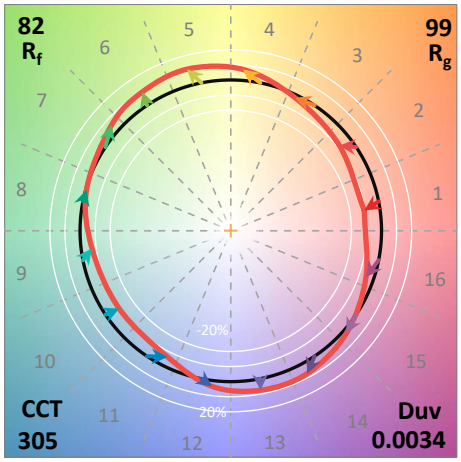
Spectral Power Distribution Comparison

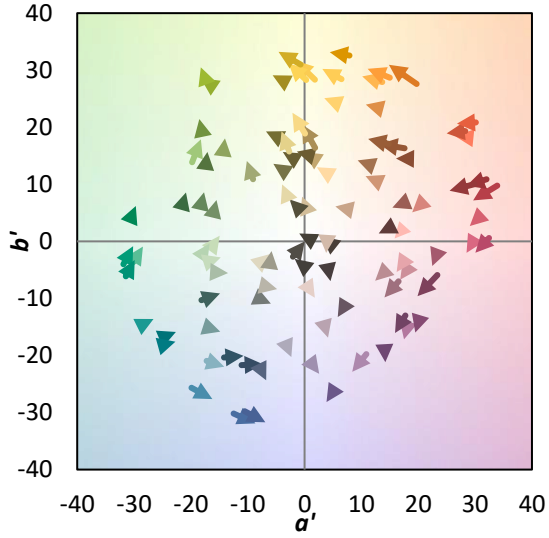


Color Vector Graphics







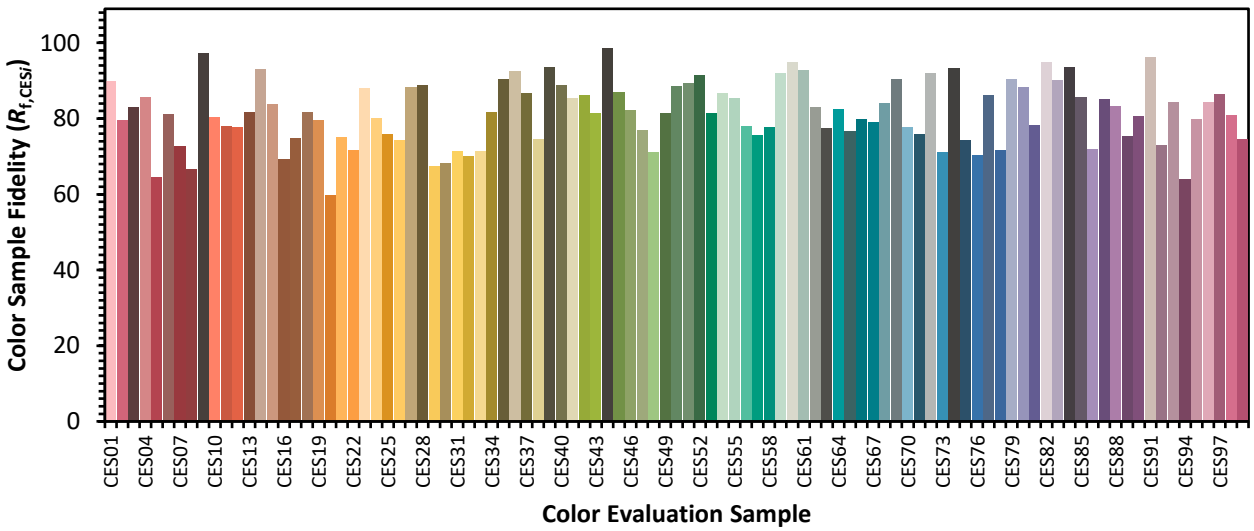


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

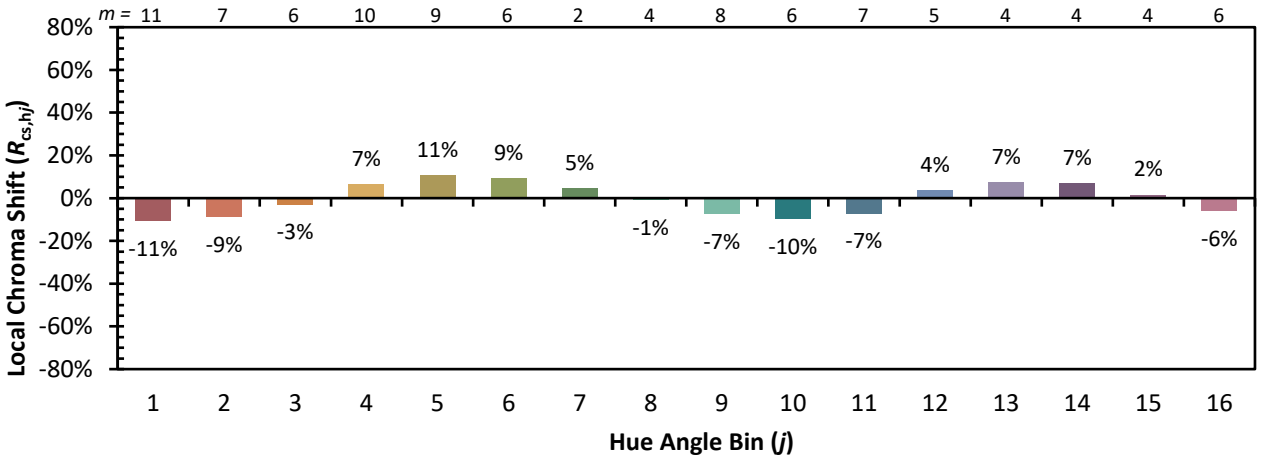
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

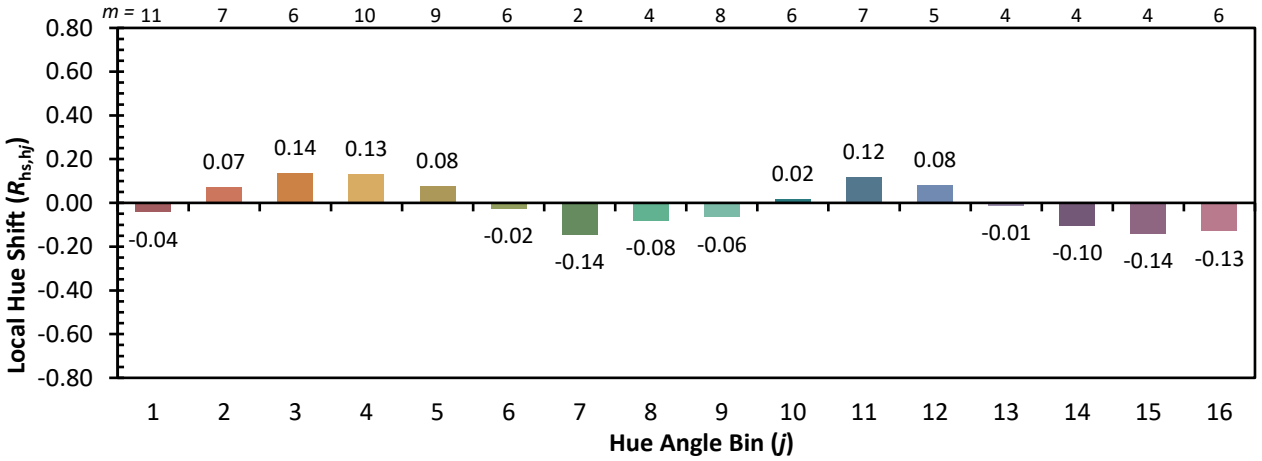


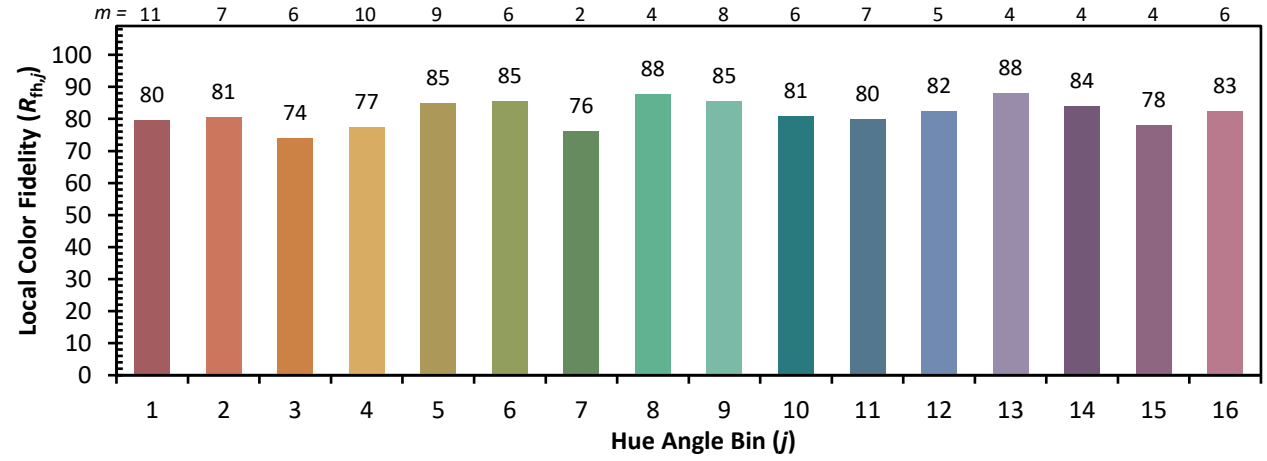
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



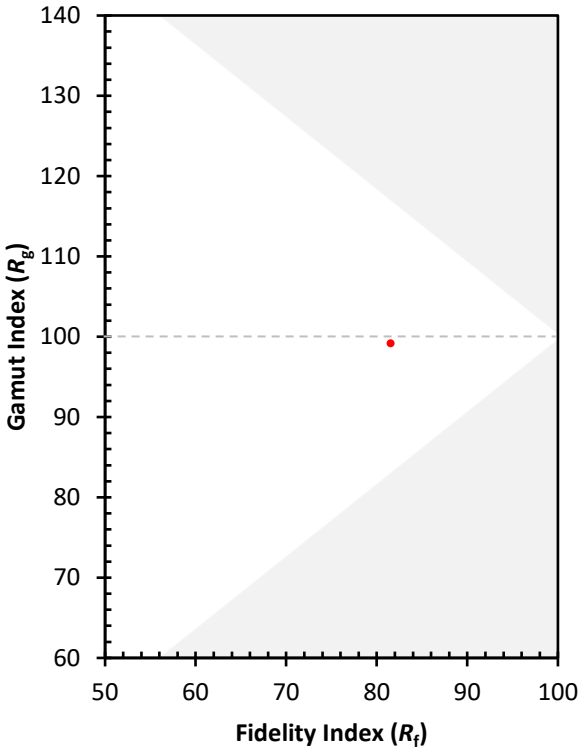


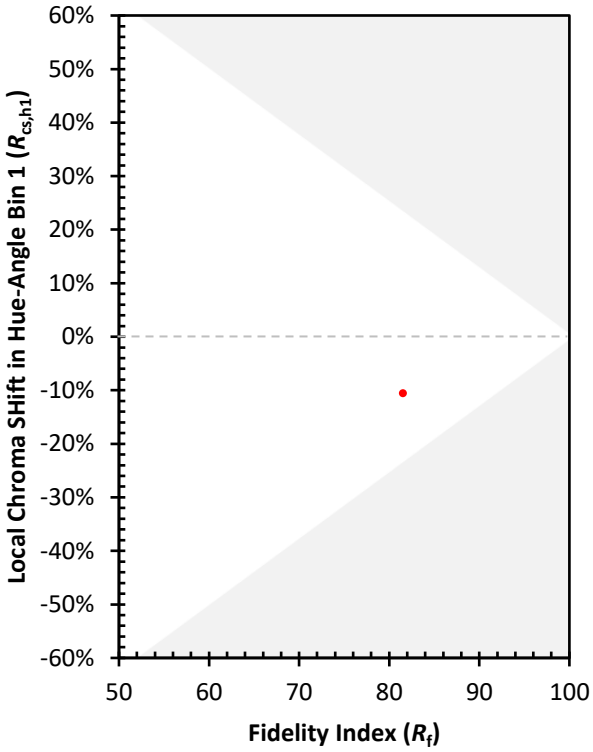


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





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