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: P639962

Luminaire Tested: GWS-SA5C-830-U-SL4-W-HSS

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:	P639962
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-36)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5C-830-U-SL4-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	14904.5 lumens
Efficiency:	N/A
Efficacy:	94.6 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G3

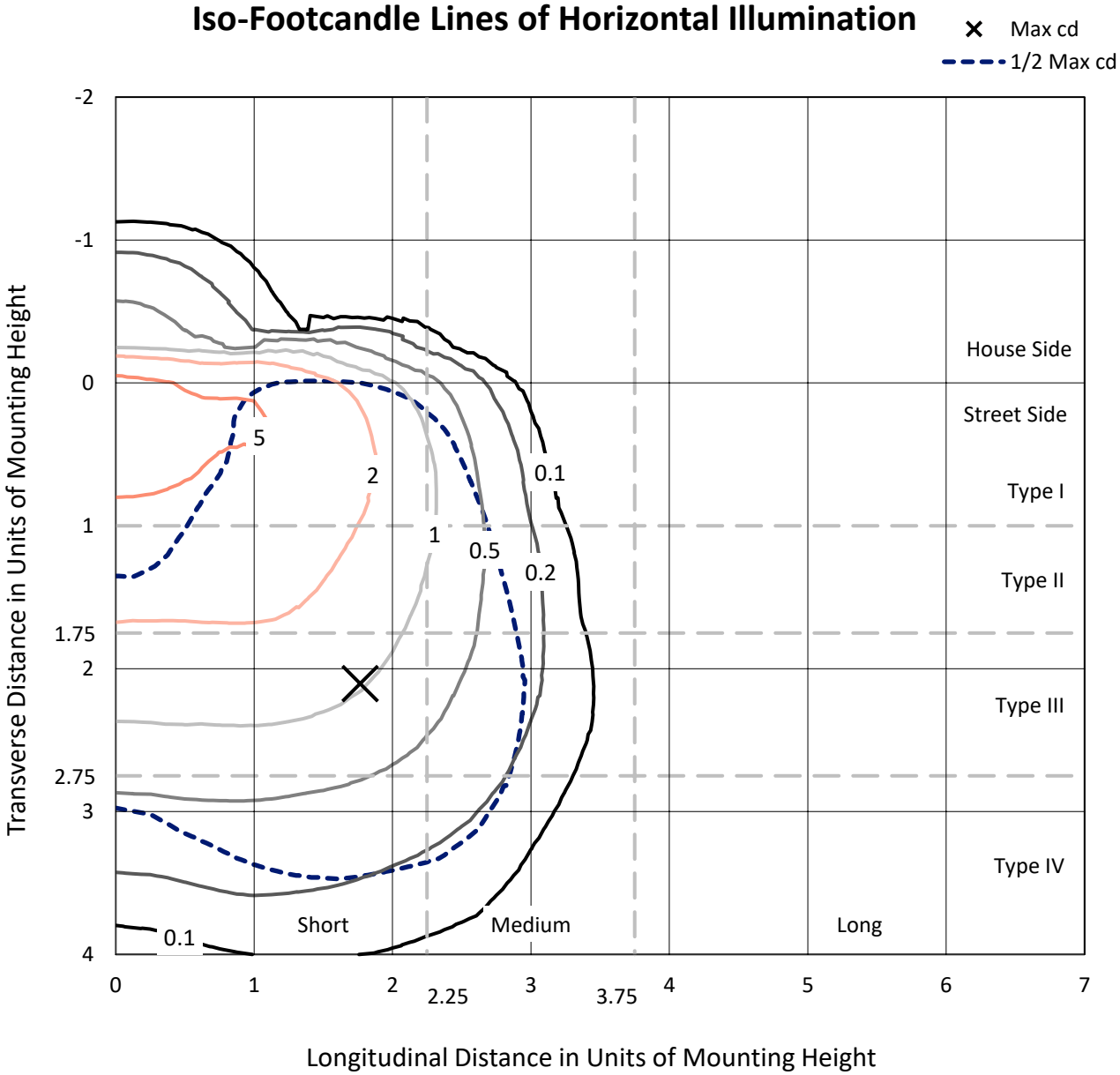
Input Watts (W):	157.5
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P639962
CATALOG NUMBER: GWS-SA5C-830-U-SL4-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



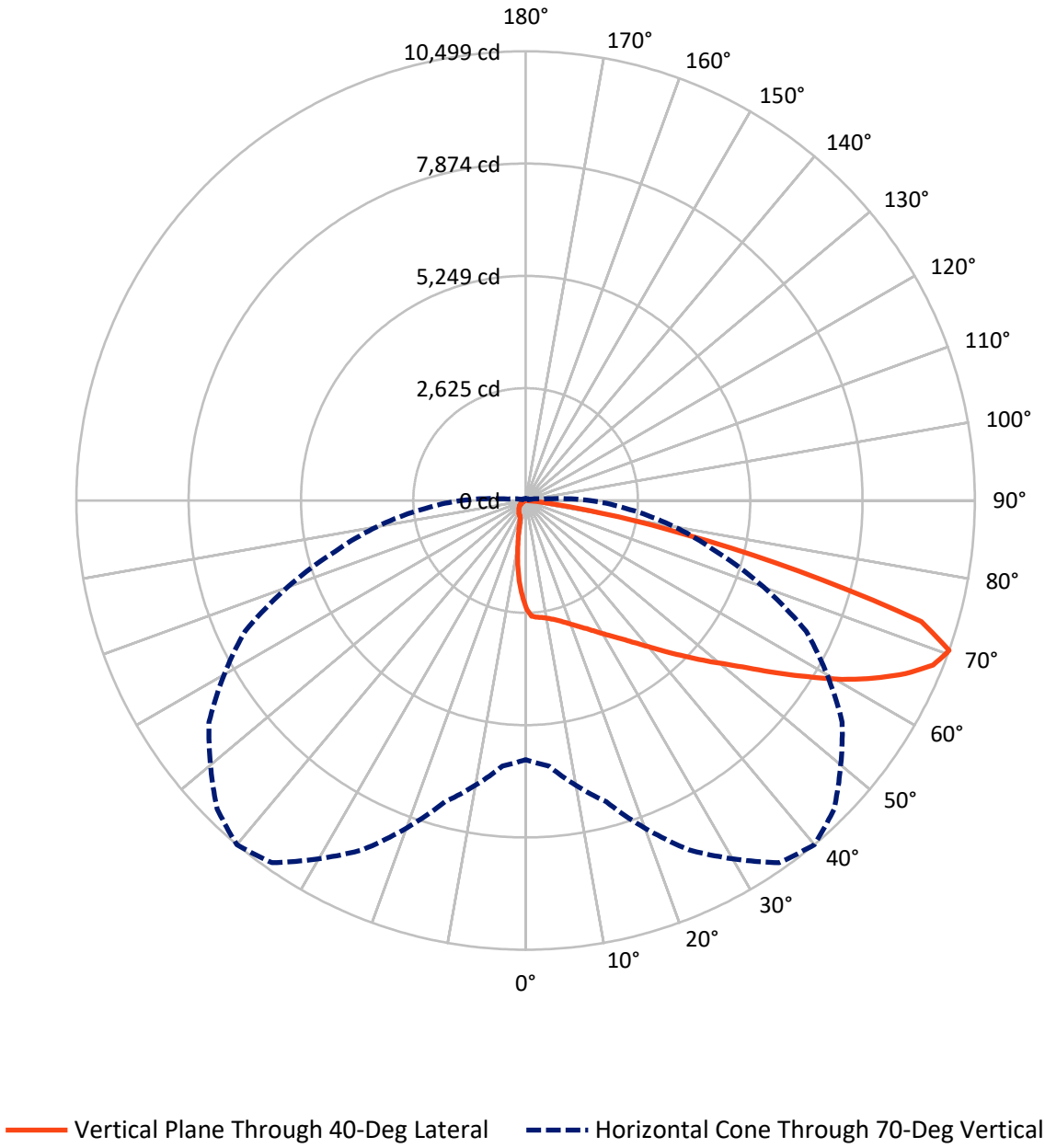
Based on 20 foot mounting height. Maximum calculated value = 6.9 fc
Type IV - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P639962
CATALOG NUMBER: GWS-SA5C-830-U-SL4-W-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

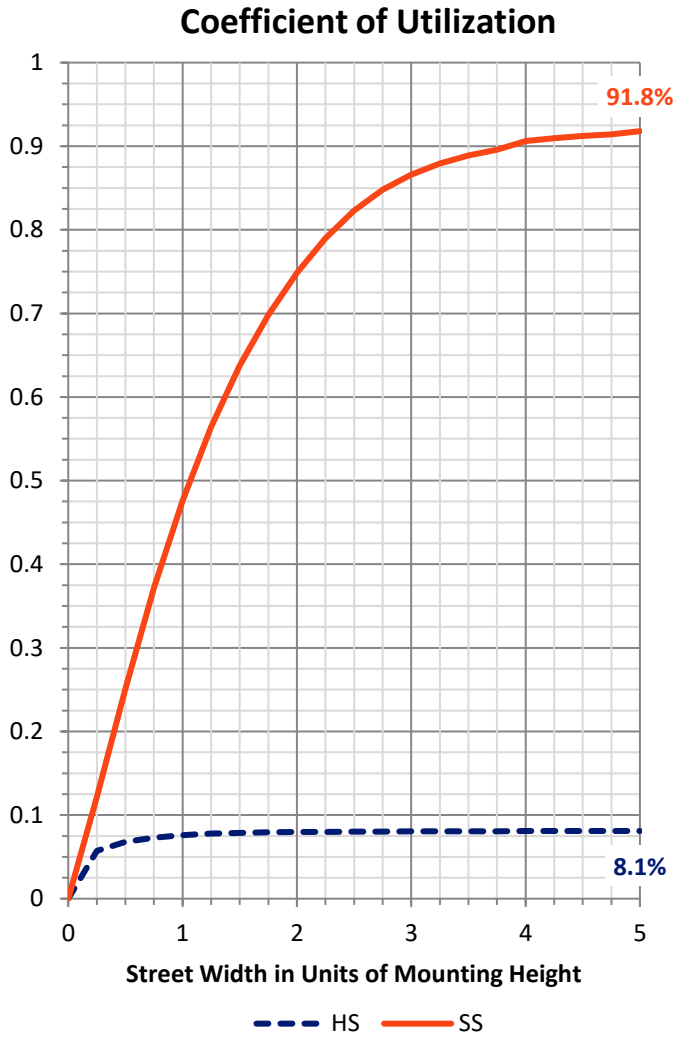
REPORT NUMBER: P639962
CATALOG NUMBER: GWS-SA5C-830-U-SL4-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1218.8	0.0	1218.8
	% Fixture	8.2	0.0	8.2
Street Side	Lumens	13685.7	0.0	13685.7
	% Fixture	91.8	0.0	91.8
Total	Lumens	14904.5	0.0	14904.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.8	1.4
10°-20°	542.1	3.6
20°-30°	907.4	6.1
30°-40°	1425.2	9.6
40°-50°	2254.2	15.1
50°-60°	3288.4	22.1
60°-70°	4076.4	27.4
70°-80°	2062.4	13.8
80°-90°	134.6	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°	14904.5	100.0
0°-180°	14904.5	100.0



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

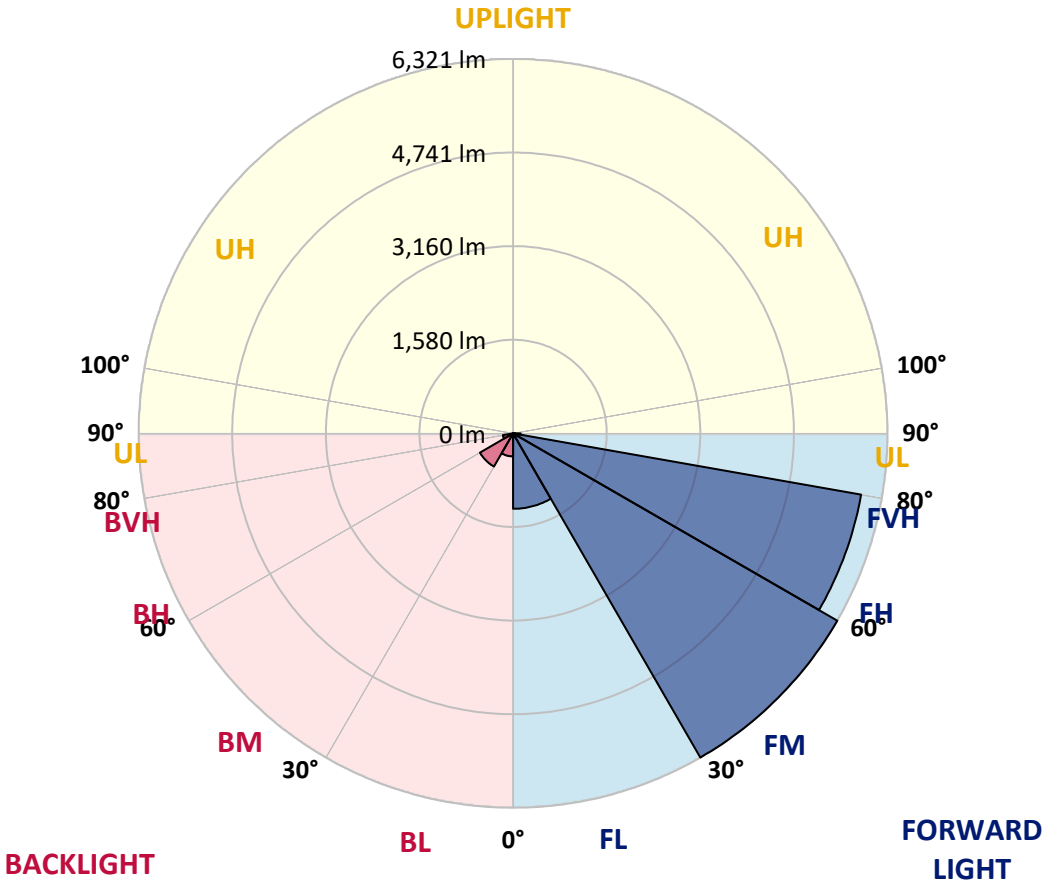
Scaled Data Report

REPORT NUMBER: P639962
CATALOG NUMBER: GWS-SA5C-830-U-SL4-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1274.1	8.5			
FM	(30°-60°)	6320.8	42.4			
FH	(60°-80°)	5965.0	40.0			G3/7500
FVH	(80°-90°)	125.8	0.8			G2/225
BL	(0°-30°)	389.2	2.6	B1/500		
BM	(30°-60°)	646.9	4.3	B1/1000		
BH	(60°-80°)	173.8	1.2	B1/500		G1/500
BVH	(80°-90°)	8.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3
Type IV Short



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

Scaled Data Report

REPORT NUMBER: P639962
CATALOG NUMBER: GWS-SA5C-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1
2.5°	2719.0	2728.5	2727.1	2731.2	2721.7	2706.8	2704.1	2683.7	2647.1	2601.0	2549.5
5°	2774.6	2785.4	2777.3	2773.2	2755.6	2739.3	2735.2	2713.5	2671.5	2609.1	2519.6
7.5°	2822.0	2824.7	2819.3	2809.8	2784.1	2762.4	2747.4	2717.6	2667.4	2605.1	2502.0
10°	2830.2	2828.8	2831.5	2832.9	2816.6	2797.6	2785.4	2744.7	2681.0	2614.5	2503.3
12.5°	2820.7	2820.7	2838.3	2858.6	2858.6	2849.2	2836.9	2800.3	2725.7	2647.1	2530.5
15°	2832.9	2836.9	2870.9	2908.8	2921.0	2911.5	2906.1	2868.1	2790.8	2704.1	2579.3
17.5°	2876.3	2880.3	2934.6	2991.5	3006.5	2995.6	2984.8	2946.8	2864.1	2769.1	2634.9
20°	2940.0	2950.9	3020.0	3093.3	3106.8	3093.3	3071.6	3018.7	2935.9	2839.7	2687.8
22.5°	3056.6	3063.4	3138.0	3215.3	3222.1	3200.4	3167.8	3094.6	3007.8	2914.2	2747.4
25°	3211.2	3220.7	3295.3	3369.9	3352.3	3319.7	3275.0	3192.2	3093.3	3002.4	2823.4
27.5°	3395.7	3406.5	3479.7	3544.8	3498.7	3460.8	3410.6	3307.5	3207.2	3124.4	2921.0
30°	3595.0	3604.5	3669.6	3727.9	3666.9	3622.1	3562.5	3456.7	3355.0	3292.6	3059.3
32.5°	3787.6	3786.2	3848.6	3896.1	3833.7	3798.4	3744.2	3637.0	3555.7	3528.6	3265.5
35°	3966.6	3966.6	4018.1	4065.6	4020.8	4001.8	3951.7	3866.2	3820.1	3852.7	3540.8
37.5°	4146.9	4137.4	4186.3	4239.1	4235.1	4236.4	4208.0	4167.3	4170.0	4285.3	3919.1
40°	4296.1	4292.0	4349.0	4418.2	4472.4	4515.8	4498.2	4513.1	4598.5	4814.1	4403.2
42.5°	4415.4	4424.9	4498.2	4608.0	4745.0	4833.1	4845.3	4906.3	5126.0	5459.6	4949.7
45°	4552.4	4553.8	4655.5	4823.6	5042.0	5181.6	5230.5	5387.8	5699.7	6129.5	5549.1
47.5°	4720.6	4704.3	4818.2	5054.2	5370.1	5576.3	5663.0	5859.7	6342.5	6783.2	6037.3
50°	4906.3	4876.5	5005.3	5326.7	5737.6	5995.3	6171.6	6459.1	6979.8	7320.2	6400.8
52.5°	5122.0	5093.5	5239.9	5640.0	6178.4	6491.6	6718.1	7008.3	7526.3	7729.7	6617.7
55°	5395.9	5367.4	5522.0	6015.6	6699.1	7105.9	7343.2	7587.3	8034.9	8032.1	6775.0
57.5°	5699.7	5660.3	5874.6	6490.3	7348.7	7771.8	8013.2	8132.5	8421.3	8266.7	6880.8
60°	6048.2	6012.9	6309.9	7055.8	8098.6	8490.5	8642.4	8593.6	8738.7	8405.1	6844.2
62.5°	6362.8	6346.5	6715.4	7655.1	8813.3	9144.1	9186.2	8973.3	8971.9	8407.8	6597.4
65°	6689.6	6720.8	7268.7	8345.4	9532.0	9754.4	9682.5	9350.3	9065.5	8075.5	5867.8
67.5°	6811.7	6902.5	7633.5	8969.2	10098.8	10272.4	10146.3	9538.8	8676.3	6958.1	4468.3
70°	6057.7	6228.5	7289.0	9004.5	10333.4	10498.9	10196.5	9031.6	7233.4	4609.4	2447.7
72.5°	4606.7	4806.0	6073.9	7373.1	9293.3	9670.3	9153.6	7358.2	4662.3	2019.2	821.8
75°	2577.9	2793.6	4523.9	5551.8	6239.4	6583.8	6394.0	4720.6	2065.3	527.5	245.5
77.5°	872.0	943.8	2104.7	3435.0	4118.5	3809.3	3224.8	2344.7	759.4	200.7	130.2
80°	516.7	543.8	783.8	1710.0	2167.0	1796.8	1418.5	866.5	386.5	107.1	90.9
82.5°	154.6	183.1	432.6	634.7	848.9	528.9	447.5	495.0	200.7	58.3	75.9
85°	0.0	0.0	92.2	196.6	222.4	86.8	86.8	280.7	36.6	24.4	55.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.4	6.8	4.1	5.4	12.2
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: P639962
CATALOG NUMBER: GWS-SA5C-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1
2.5°	2512.8	2465.4	2409.8	2356.9	2306.7	2241.6	2210.4	2172.5	2139.9	2122.3	2131.8
5°	2462.7	2388.1	2274.2	2158.9	2042.3	1932.4	1833.4	1767.0	1707.3	1676.1	1682.9
7.5°	2419.3	2318.9	2141.3	1952.8	1765.6	1577.1	1423.9	1304.6	1212.3	1174.4	1167.6
10°	2400.3	2274.2	2023.3	1752.1	1464.6	1211.0	994.0	862.5	768.9	722.8	730.9
12.5°	2409.8	2251.1	1922.9	1555.4	1182.5	886.9	679.4	556.0	489.5	462.4	455.6
15°	2436.9	2245.7	1833.4	1354.7	912.7	619.7	469.2	419.0	405.5	402.8	402.8
17.5°	2468.1	2247.0	1741.2	1151.3	693.0	459.7	401.4	391.9	387.8	385.1	386.5
20°	2499.3	2247.0	1635.4	945.2	520.7	397.3	382.4	375.6	371.6	370.2	370.2
22.5°	2537.3	2247.0	1517.5	754.0	417.7	377.0	364.8	360.7	356.7	355.3	353.9
25°	2583.4	2248.4	1387.3	589.9	379.7	359.4	349.9	345.8	341.7	339.0	339.0
27.5°	2649.8	2259.3	1243.5	459.7	358.0	343.1	335.0	330.9	326.8	322.8	322.8
30°	2746.1	2286.4	1082.2	379.7	337.7	325.5	317.3	314.6	310.5	306.5	305.1
32.5°	2889.8	2333.8	915.4	340.4	318.7	306.5	297.0	294.3	290.2	286.1	284.8
35°	3090.5	2420.6	752.6	316.0	294.3	282.1	276.6	275.3	269.9	265.8	265.8
37.5°	3384.8	2561.7	596.7	291.6	273.9	264.4	257.7	254.9	249.5	245.5	244.1
40°	3744.2	2744.7	463.8	272.6	254.9	245.5	238.7	234.6	227.8	222.4	219.7
42.5°	4202.5	2968.5	366.1	252.2	237.3	227.8	222.4	214.3	204.8	196.6	195.3
45°	4679.9	3199.0	302.4	233.2	221.0	212.9	206.1	195.3	181.7	172.2	169.5
47.5°	5046.0	3342.8	264.4	212.9	203.4	196.6	188.5	174.9	158.7	147.8	145.1
50°	5307.8	3364.5	236.0	193.9	188.5	181.7	169.5	153.2	135.6	124.8	122.0
52.5°	5436.6	3266.8	212.9	176.3	172.2	165.4	150.5	132.9	113.9	103.1	100.4
55°	5494.9	3082.4	191.2	161.4	156.0	147.8	131.5	112.6	93.6	84.1	81.4
57.5°	5471.8	2809.8	172.2	146.5	139.7	130.2	112.6	92.2	77.3	67.8	66.4
60°	5301.0	2427.4	153.2	131.5	123.4	112.6	94.9	75.9	62.4	55.6	54.2
62.5°	4932.1	1952.8	134.3	113.9	108.5	97.6	81.4	62.4	51.5	47.5	46.1
65°	4176.8	1380.5	115.3	96.3	93.6	82.7	67.8	51.5	44.8	42.0	40.7
67.5°	3002.4	839.4	97.6	82.7	80.0	70.5	57.0	44.8	40.7	39.3	39.3
70°	*1509.3*	*397.3*	*77.3*	*67.8*	*67.8*	*58.3*	*48.8*	*40.7*	*39.3*	*38.0*	*38.0*
72.5°	512.6	169.5	58.3	52.9	55.6	50.2	42.0	38.0	38.0	38.0	38.0
75°	174.9	89.5	40.7	38.0	40.7	40.7	36.6	36.6	38.0	38.0	38.0
77.5°	113.9	59.7	28.5	25.8	31.2	31.2	31.2	33.9	36.6	36.6	36.6
80°	93.6	32.5	19.0	17.6	23.1	23.1	25.8	31.2	33.9	33.9	33.9
82.5°	80.0	20.3	10.8	12.2	16.3	17.6	21.7	25.8	29.8	31.2	31.2
85°	54.2	10.8	8.1	9.5	10.8	13.6	17.6	21.7	24.4	27.1	27.1
87.5°	14.9	4.1	5.4	6.8	6.8	9.5	13.6	16.3	19.0	20.3	20.3
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

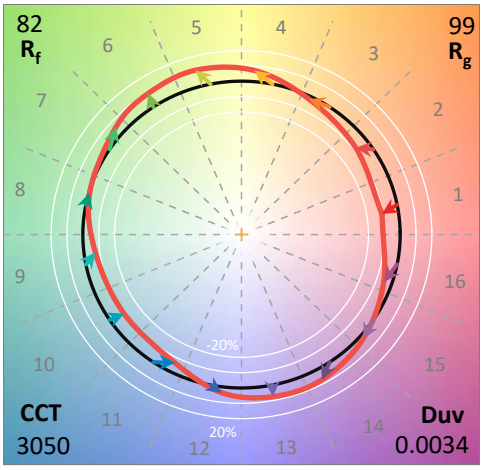
Test Information

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

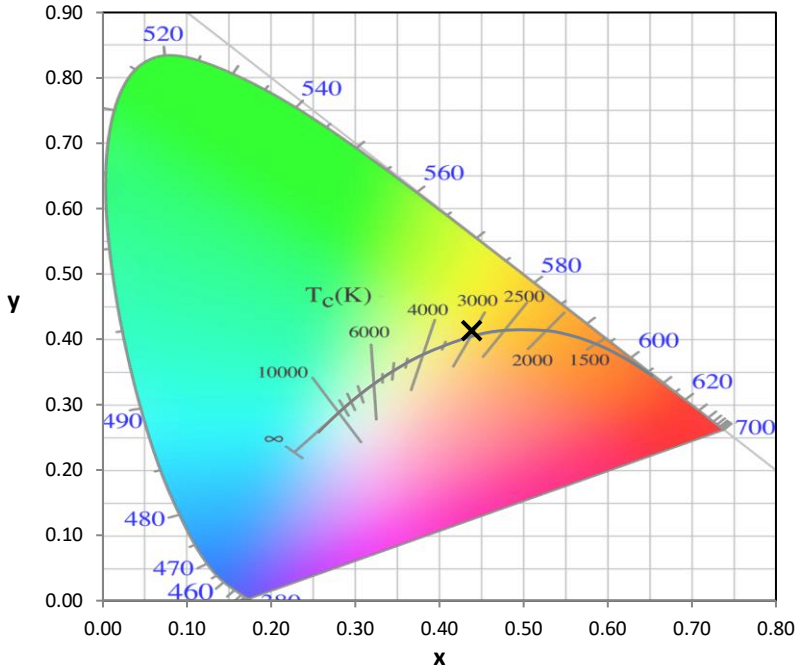
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

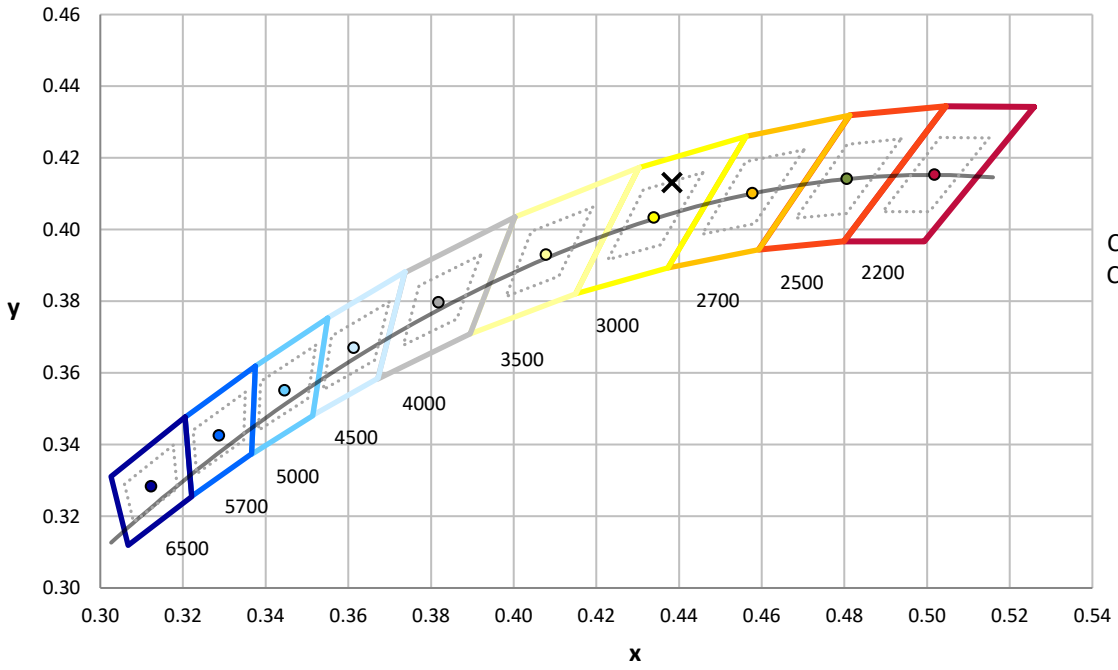
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

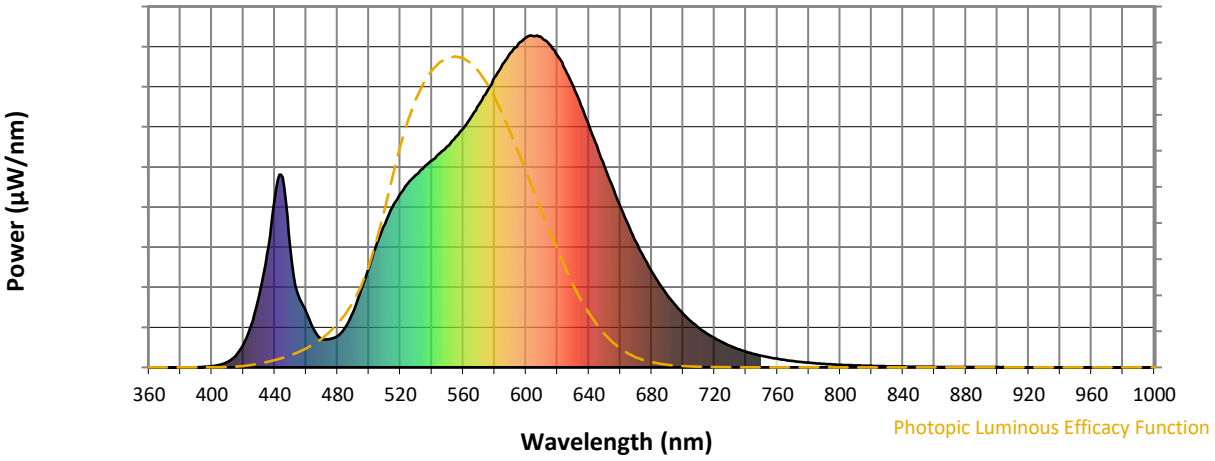


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

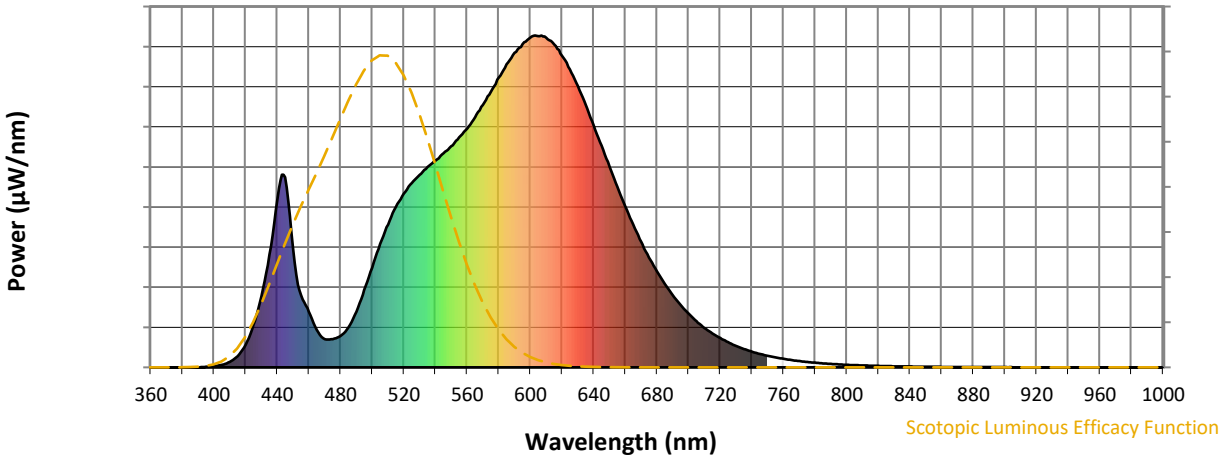


Photopic Lumens: NR

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

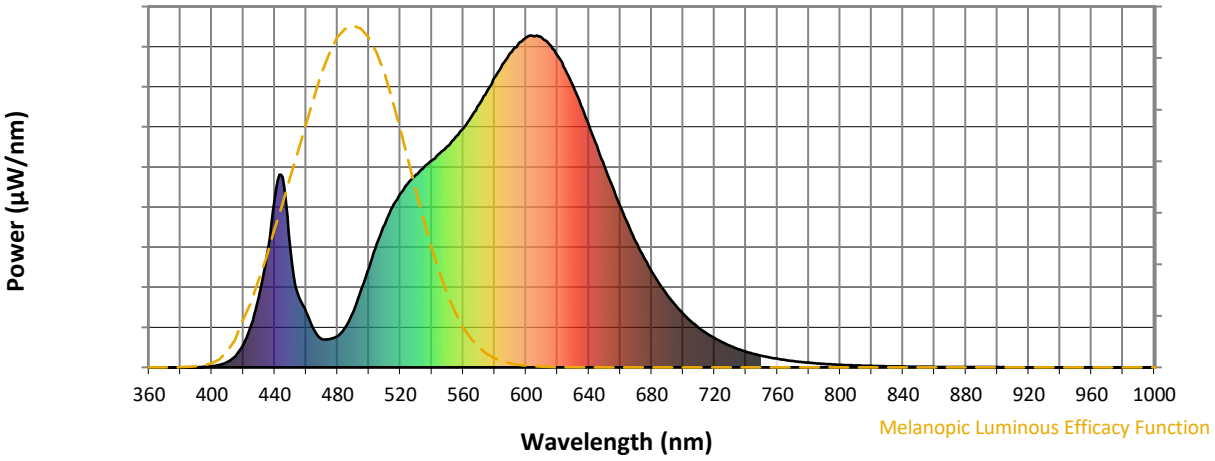


Scotopic Lumens: NR **S/P: 1.27**

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			

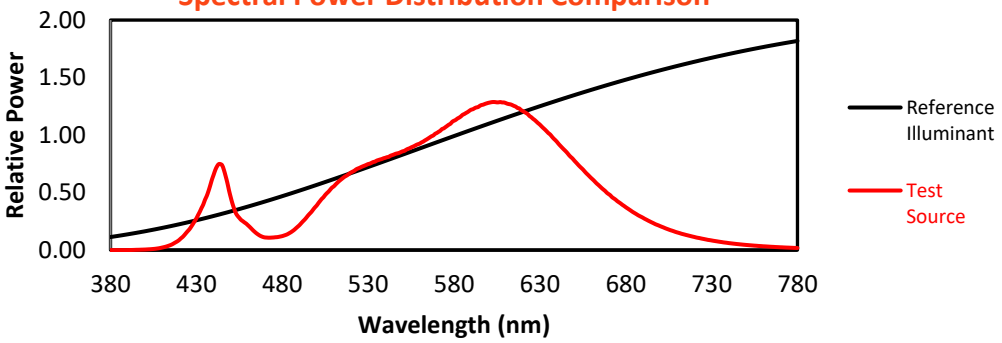
REPORT NUMBER: SP1-2408-195-9

TM-30-18

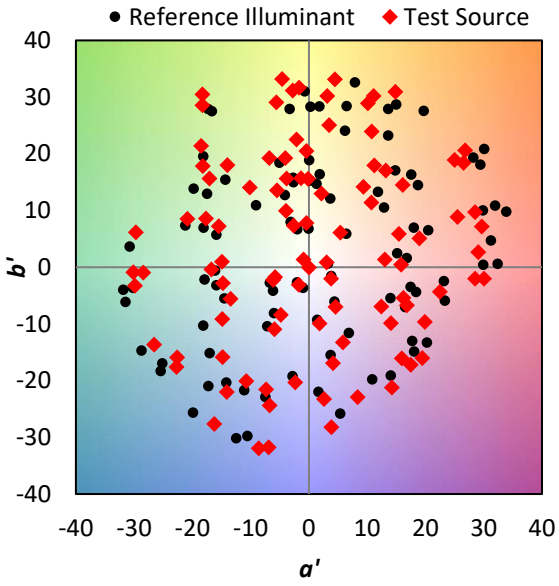
Summary

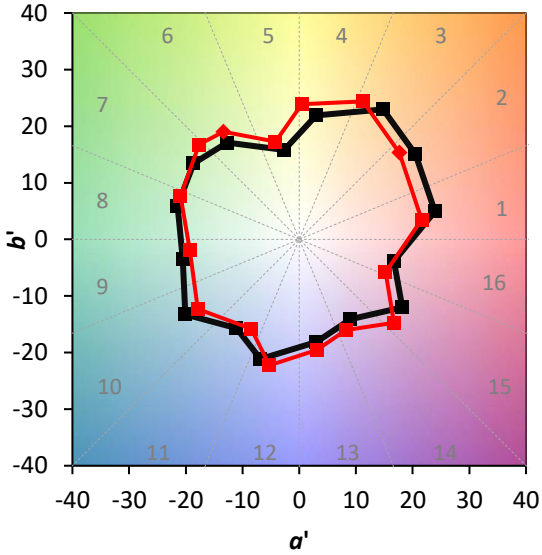
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

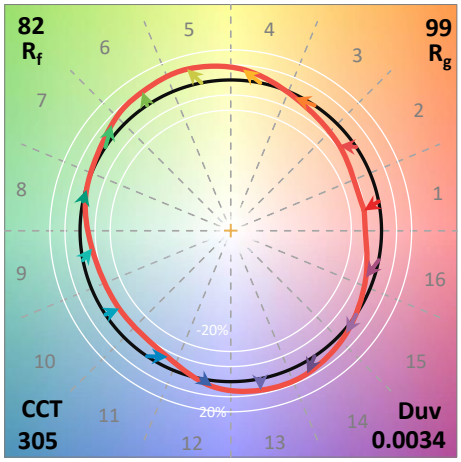
Spectral Power Distribution Comparison

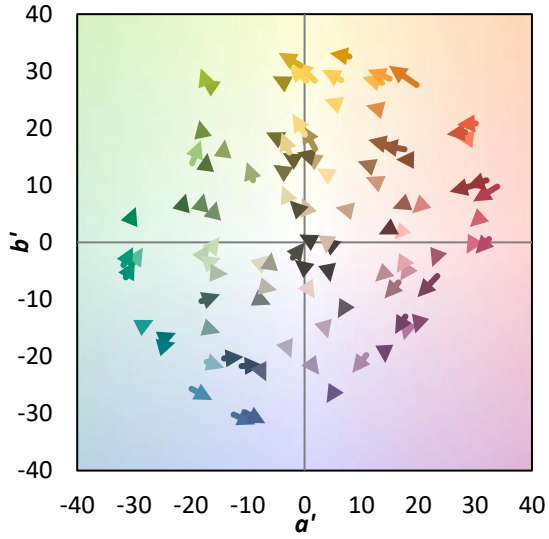


Color Vector Graphics







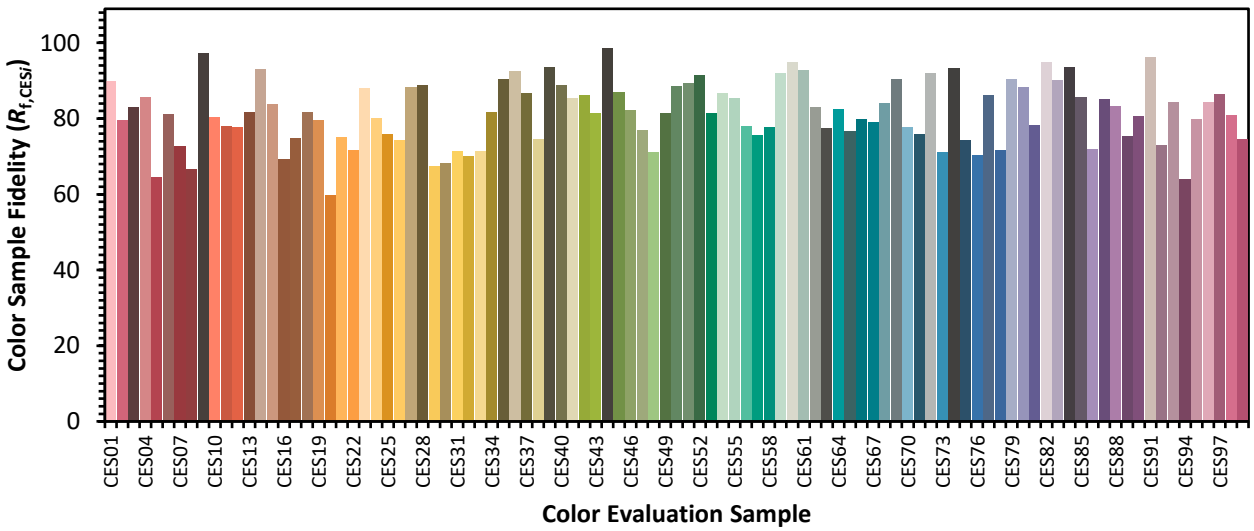


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

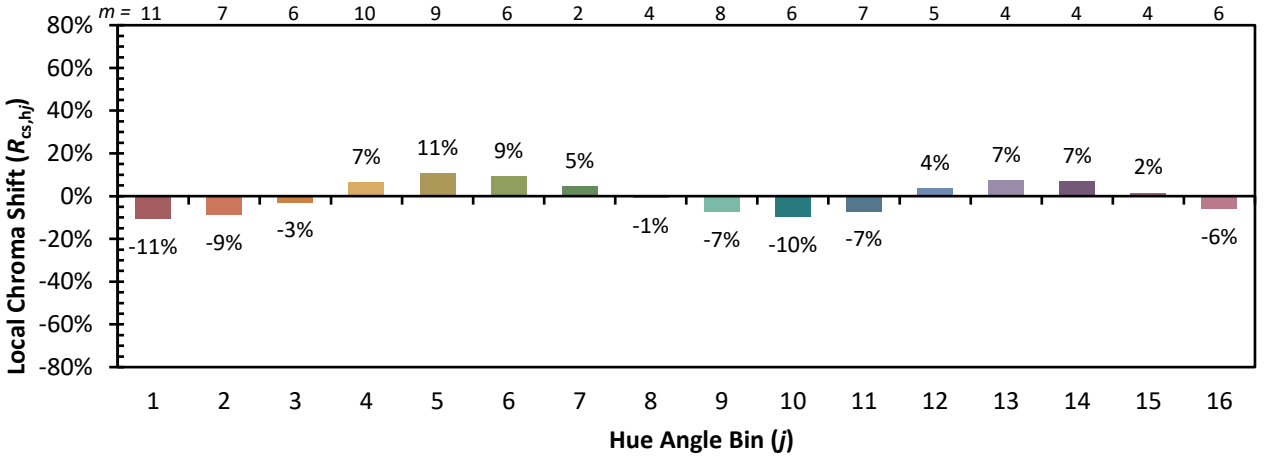
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

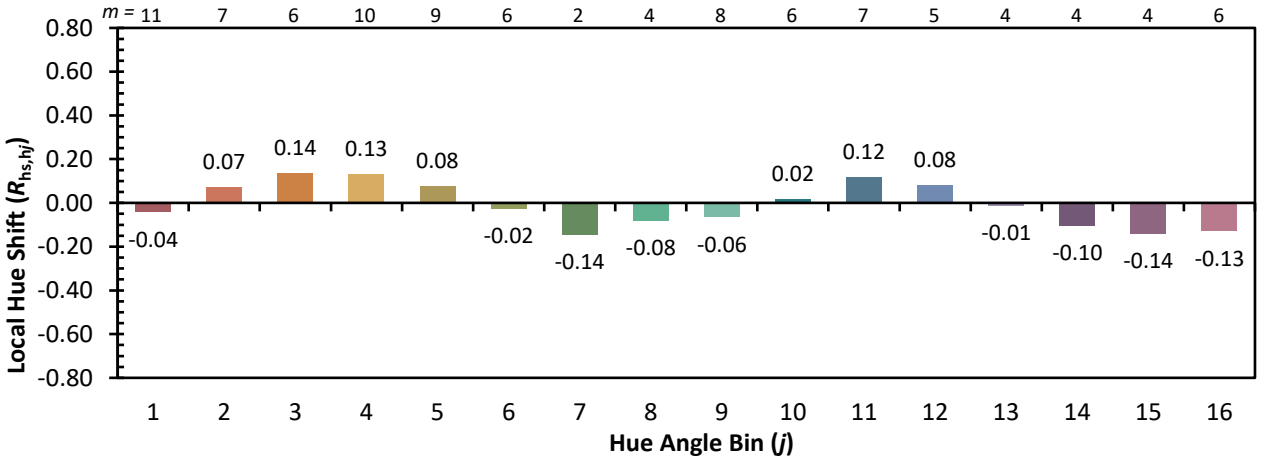


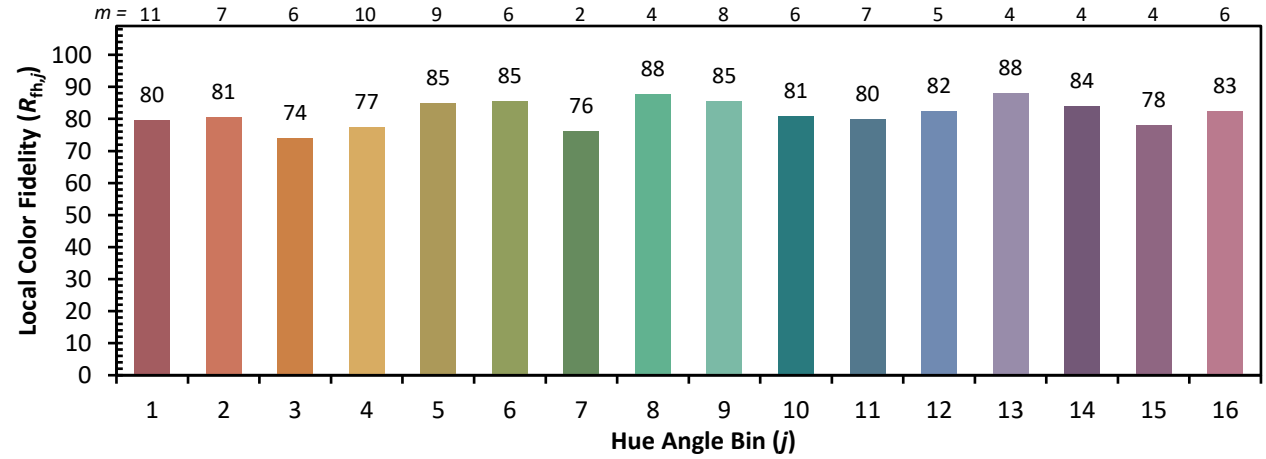
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



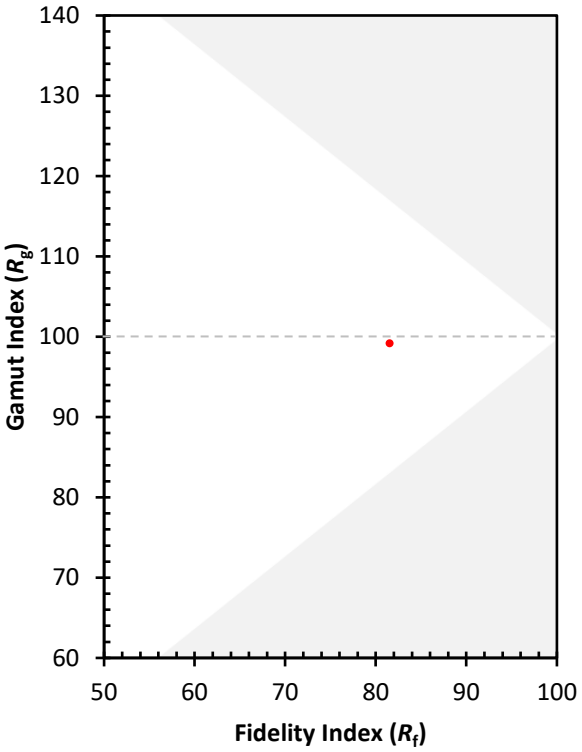


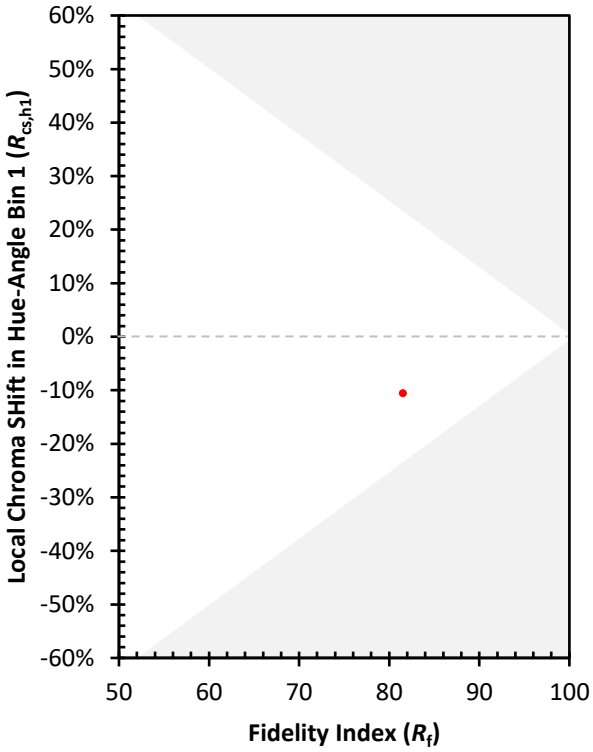


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)