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: P633512

Luminaire Tested: GWS-SA2E-830-U-AFL-W-GRSBK

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:	P633512
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-46)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA2E-830-U-AFL-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8729.7 lumens
Efficiency:	N/A
Efficacy:	80.7 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G0

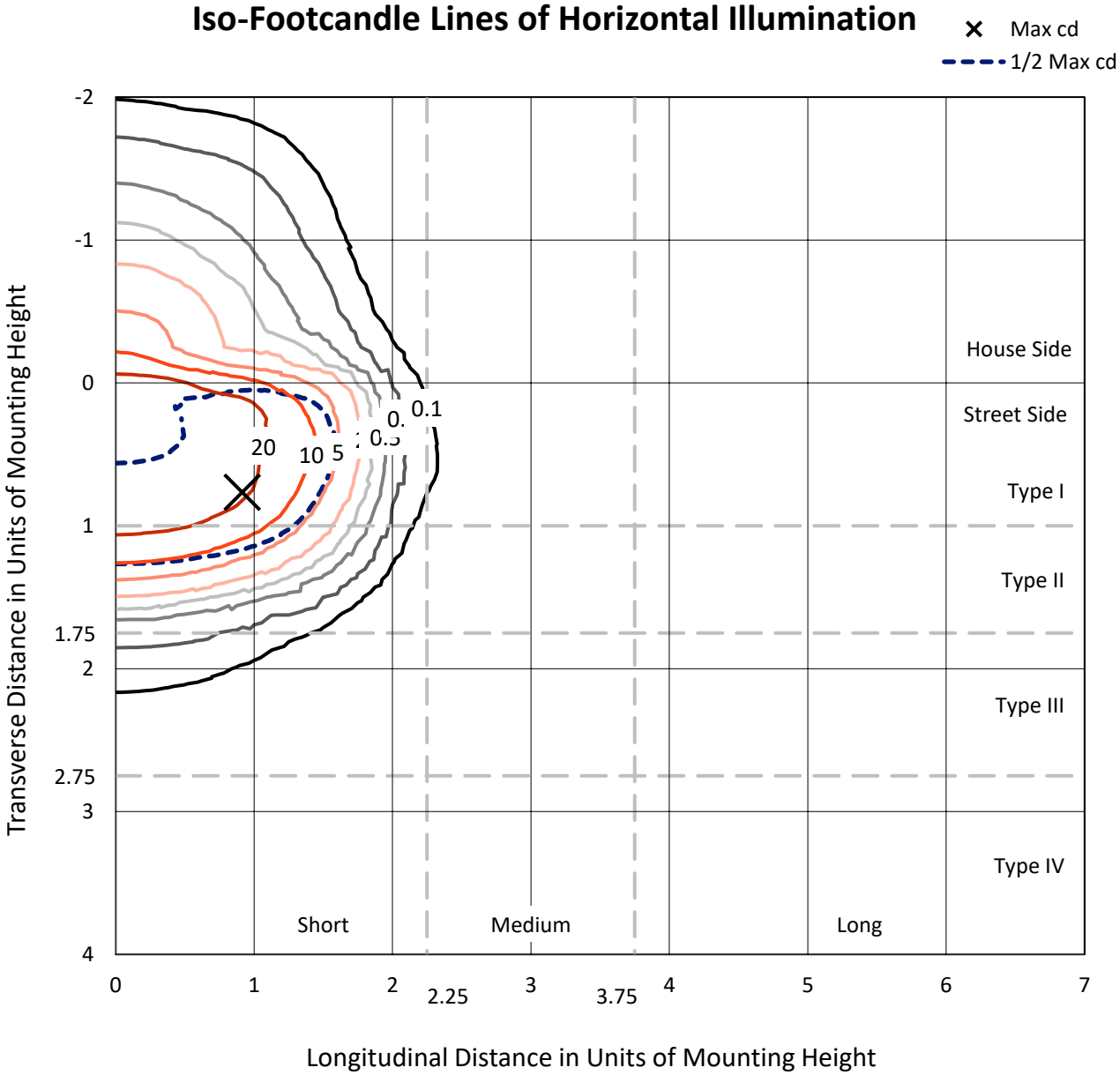
Input Watts (W):	108.2
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P633512
CATALOG NUMBER: GWS-SA2E-830-U-AFL-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



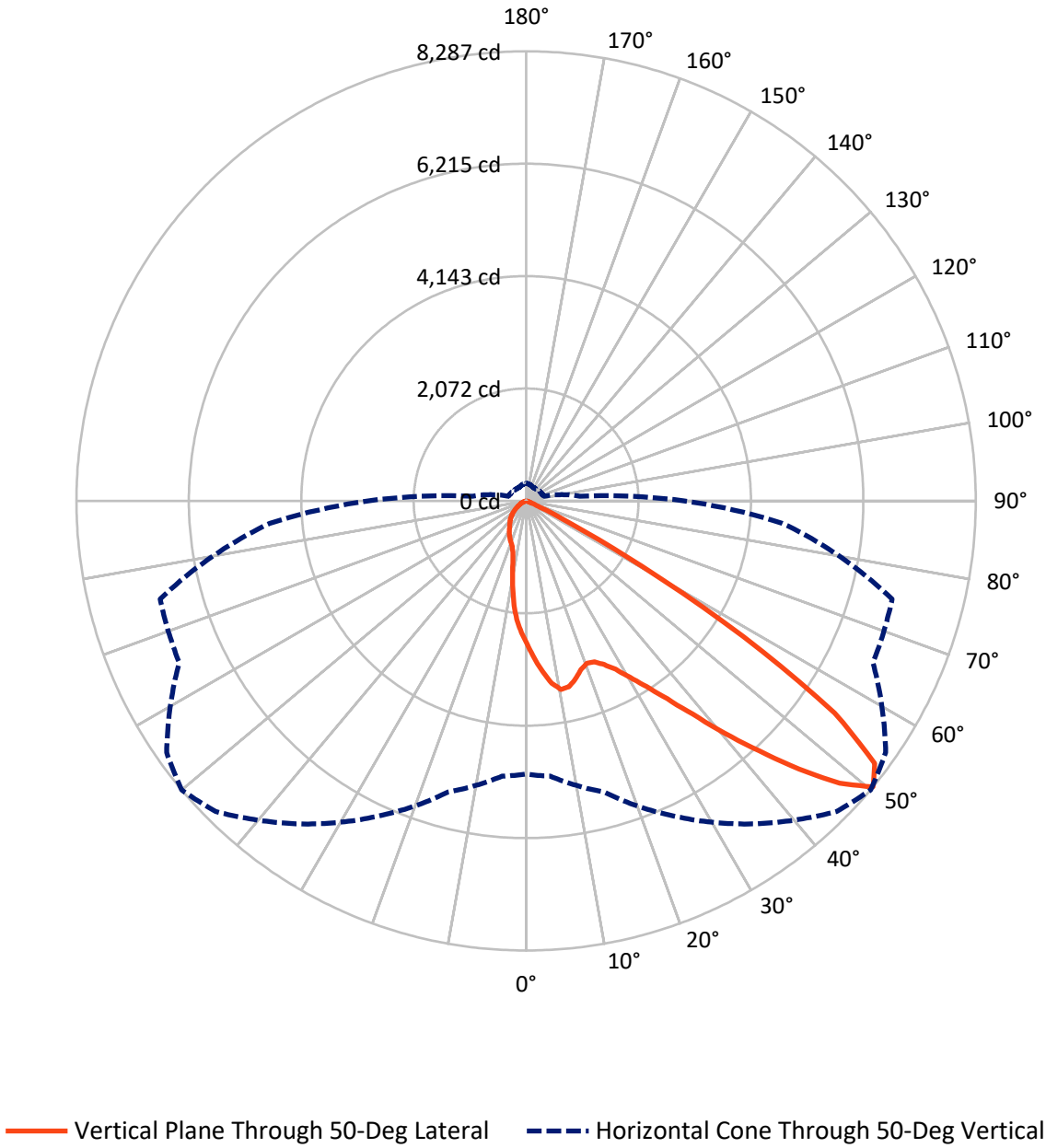
Based on 10 foot mounting height. Maximum calculated value = 33.9 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P633512
CATALOG NUMBER: GWS-SA2E-830-U-AFL-W-GRSBK

Luminous Intensity Polar Plot



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

Scaled Data Report

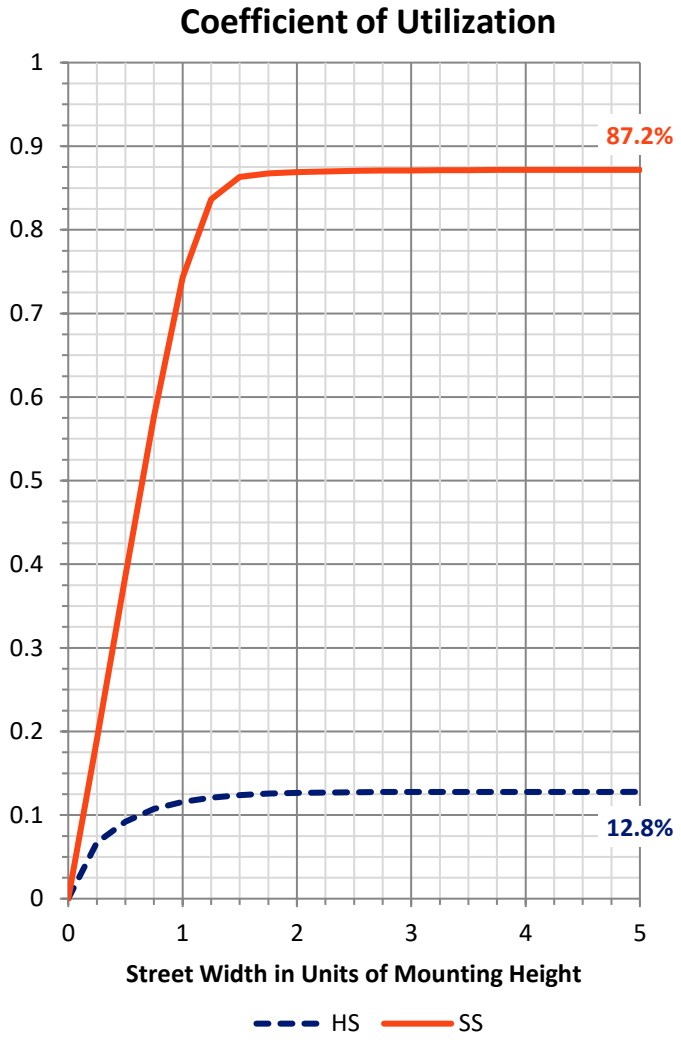
REPORT NUMBER: P633512
CATALOG NUMBER: GWS-SA2E-830-U-AFL-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1121.6	0.0	1121.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	7608.1	0.0	7608.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	8729.7	0.0	8729.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.3	2.8
10°-20°	633.0	7.3
20°-30°	1044.7	12.0
30°-40°	1723.9	19.7
40°-50°	2727.7	31.2
50°-60°	2065.2	23.7
60°-70°	258.5	3.0
70°-80°	29.2	0.3
80°-90°	2.2	0.0
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°	8729.7	100.0
0°-180°	8729.7	100.0



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

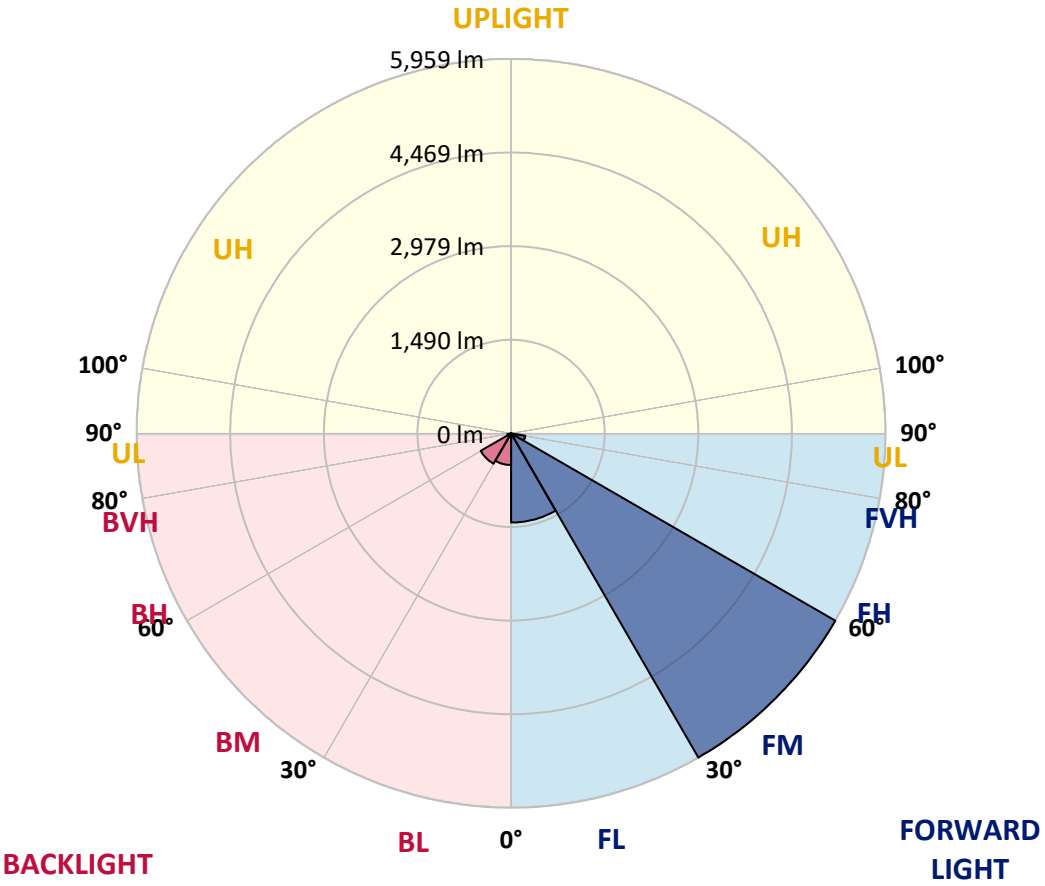
Scaled Data Report

REPORT NUMBER: P633512
CATALOG NUMBER: GWS-SA2E-830-U-AFL-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1419.6	16.3			
FM	(30°-60°)	5958.9	68.3			
FH	(60°-80°)	228.5	2.6			G0/660
FVH	(80°-90°)	1.0	0.0			G0/10
BL	(0°-30°)	503.4	5.8	B2/1000		
BM	(30°-60°)	557.8	6.4	B1/1000		
BH	(60°-80°)	59.2	0.7	B0/110		G0/110
BVH	(80°-90°)	1.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G0
Type II Short



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

Scaled Data Report

REPORT NUMBER: P633512
CATALOG NUMBER: GWS-SA2E-830-U-AFL-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8
2.5°	3013.7	3037.8	3031.1	2999.5	2965.5	2941.4	2904.0	2892.4	2807.6	2748.6	2686.3
5°	3377.6	3385.1	3376.8	3338.6	3278.7	3221.4	3159.9	3124.2	2982.1	2854.1	2723.7
7.5°	3464.8	3455.7	3471.5	3490.6	3482.3	3457.4	3392.6	3353.5	3184.0	2975.4	2777.7
10°	3192.3	3171.5	3230.5	3329.4	3433.3	3550.4	3533.8	3537.1	3380.9	3128.3	2848.3
12.5°	2830.9	2822.6	2866.6	2981.3	3184.8	3450.7	3514.7	3621.9	3561.2	3293.7	2928.9
15°	2672.2	2676.3	2702.9	2775.2	2921.4	3252.1	3405.9	3599.5	3722.4	3454.0	3017.8
17.5°	2696.3	2711.2	2710.4	2734.5	2823.4	3088.5	3267.9	3528.8	3847.1	3638.5	3120.0
20°	2860.0	2874.9	2852.5	2834.2	2864.1	3046.9	3195.6	3457.4	3931.0	3824.6	3228.0
22.5°	3105.1	3122.5	3069.3	3017.0	2997.9	3115.0	3223.1	3428.3	3995.0	3995.0	3324.4
25°	3401.7	3425.8	3343.5	3250.5	3197.3	3258.8	3340.2	3493.9	4060.6	4147.8	3390.1
27.5°	3733.2	3734.1	3663.4	3558.7	3459.0	3466.5	3515.5	3641.8	4132.9	4312.4	3441.6
30°	4106.3	4108.8	4014.9	3889.4	3764.0	3729.9	3771.5	3867.0	4283.3	4519.3	3513.0
32.5°	4588.2	4599.9	4465.3	4280.8	4117.9	4054.0	4078.1	4178.6	4522.6	4778.5	3620.2
35°	5239.7	5252.1	5053.5	4810.1	4550.8	4454.5	4478.5	4579.9	4869.1	5146.6	3791.4
37.5°	5882.8	5899.4	5698.3	5471.5	5115.8	4956.3	4981.2	5077.6	5389.2	5655.1	4065.6
40°	6327.3	6349.7	6287.4	6134.5	5804.7	5595.3	5625.2	5660.1	5961.7	6263.3	4421.2
42.5°	6561.6	6593.2	6619.8	6697.9	6524.2	6348.9	6298.2	6300.7	6544.2	6883.2	4791.0
45°	6575.7	6606.5	6742.7	7044.4	7176.5	7139.9	7047.7	6985.4	6988.7	7296.1	5022.0
47.5°	6118.7	6176.1	6431.2	7021.9	7518.8	7822.1	7775.6	7627.7	7175.6	7323.5	4997.0
50°	5036.1	5092.6	5556.2	6406.2	7269.5	8094.6	8286.6	8088.0	7053.5	6982.0	4740.3
52.5°	3657.6	3663.4	3964.2	4957.1	6259.2	7591.9	8043.9	8024.8	6867.4	6568.3	4389.6
55°	1737.4	1716.6	2054.8	2797.6	4329.0	6140.3	6902.3	7118.3	6603.2	6269.1	4117.9
57.5°	506.0	516.0	666.4	1091.8	2165.3	3924.3	4727.0	5129.1	5420.0	5154.1	3194.0
60°	226.8	227.7	253.4	332.4	721.2	1825.5	2443.7	2941.4	3240.5	3002.9	1584.5
62.5°	164.5	165.3	175.3	187.8	245.1	618.2	916.5	1221.4	1243.9	814.3	401.3
65°	137.1	137.1	138.8	138.8	147.1	221.0	278.4	358.9	302.4	224.3	157.0
67.5°	110.5	111.3	113.0	113.0	110.5	110.5	119.6	131.3	140.4	173.7	144.6
70°	86.4	85.6	85.6	86.4	83.9	71.5	77.3	88.1	96.4	135.4	125.5
72.5°	67.3	68.1	67.3	64.0	58.2	42.4	45.7	57.3	61.5	84.8	84.8
75°	50.7	51.5	48.2	36.6	24.1	13.3	17.4	28.3	35.7	41.5	30.7
77.5°	6.6	6.6	5.0	5.0	4.2	5.0	5.0	6.6	10.0	10.0	7.5
80°	0.8	0.8	0.8	1.7	2.5	3.3	3.3	3.3	3.3	4.2	4.2
82.5°	0.8	0.8	0.8	0.8	2.5	2.5	3.3	3.3	3.3	3.3	3.3
85°	0.0	0.0	0.0	0.8	1.7	2.5	2.5	3.3	3.3	3.3	3.3
87.5°	0.0	0.0	0.0	0.8	1.7	2.5	2.5	2.5	3.3	3.3	3.3
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

Scaled Data Report

REPORT NUMBER: P633512
CATALOG NUMBER: GWS-SA2E-830-U-AFL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8	2644.8
2.5°	2648.9	2600.7	2542.6	2502.7	2446.2	2408.8	2355.6	2319.9	2289.1	2265.0	2278.3
5°	2649.7	2573.3	2454.5	2353.1	2242.6	2141.2	2032.4	1946.8	1869.5	1834.6	1853.7
7.5°	2666.4	2556.7	2374.7	2194.4	1982.5	1773.1	1577.0	1417.5	1338.6	1301.2	1312.8
10°	2698.8	2549.2	2285.8	1986.7	1642.7	1356.9	1166.6	1058.6	1014.5	991.3	995.4
12.5°	2728.7	2544.2	2170.3	1713.3	1296.2	1052.7	953.9	938.9	948.1	948.9	948.1
15°	2769.4	2535.1	2027.4	1432.5	1037.0	909.8	912.3	933.9	955.5	962.2	960.5
17.5°	2812.6	2520.9	1842.9	1163.3	879.9	868.3	897.4	926.5	948.1	951.4	952.2
20°	2857.5	2491.9	1632.7	949.7	806.8	836.7	869.1	890.7	906.5	911.5	913.2
22.5°	2878.2	2430.4	1390.1	796.8	757.8	797.7	821.8	850.0	855.0	836.7	840.0
25°	2867.4	2326.5	1153.3	693.8	708.8	748.6	784.4	770.2	749.5	736.2	740.3
27.5°	2833.4	2188.6	921.5	618.2	656.4	707.1	711.2	695.5	692.1	681.3	684.7
30°	2796.8	2029.9	741.2	557.5	603.2	656.4	643.9	649.8	650.6	638.1	642.3
32.5°	2774.4	1863.7	589.9	516.8	569.2	579.1	604.1	615.7	616.5	587.4	592.4
35°	2781.9	1700.0	499.4	483.6	537.6	535.1	570.0	576.6	528.5	488.6	492.7
37.5°	2842.5	1548.8	447.9	457.8	482.8	501.9	528.5	484.4	473.6	455.3	457.8
40°	2955.5	1420.0	417.1	442.0	445.4	476.1	435.4	441.2	442.0	430.4	432.9
42.5°	3087.6	1312.8	398.8	432.9	424.6	429.6	388.9	400.5	413.0	408.0	408.8
45°	3154.1	1208.1	383.0	401.3	403.8	356.5	347.3	359.8	375.6	378.1	378.9
47.5°	3095.1	1108.4	366.4	355.6	372.2	324.9	314.1	318.2	336.5	346.5	348.1
50°	*2914.8*	*993.8*	*341.5*	*314.9*	*305.8*	*291.6*	*281.7*	*282.5*	*303.3*	*320.7*	*324.1*
52.5°	2661.4	874.1	300.8	266.7	245.9	256.7	259.2	254.3	273.4	290.8	294.1
55°	2415.4	724.5	238.5	216.9	197.8	221.0	227.7	221.0	226.8	238.5	239.3
57.5°	1700.9	409.6	182.8	179.5	163.7	189.4	200.2	190.3	180.3	187.8	189.4
60°	788.5	214.4	140.4	140.4	136.3	162.9	181.1	167.0	147.9	151.2	153.7
62.5°	246.8	135.4	103.0	97.2	111.3	138.8	153.7	139.6	117.2	117.2	120.5
65°	139.6	116.3	81.4	74.8	90.6	111.3	120.5	105.5	85.6	83.9	83.9
67.5°	129.6	110.5	72.3	60.7	64.0	71.5	74.8	64.8	59.0	58.2	59.0
70°	107.2	92.2	58.2	41.5	39.1	38.2	39.9	37.4	35.7	36.6	39.1
72.5°	66.5	55.7	36.6	24.9	21.6	20.8	20.8	20.8	19.9	19.9	19.9
75°	24.1	20.8	16.6	12.5	10.8	10.0	10.0	10.8	10.0	9.1	8.3
77.5°	7.5	6.6	6.6	6.6	5.8	5.0	4.2	4.2	3.3	2.5	2.5
80°	4.2	4.2	4.2	4.2	3.3	3.3	2.5	1.7	0.8	0.8	0.0
82.5°	4.2	4.2	4.2	3.3	3.3	3.3	2.5	1.7	0.8	0.0	0.0
85°	3.3	3.3	3.3	3.3	3.3	3.3	2.5	1.7	0.8	0.0	0.0
87.5°	3.3	3.3	3.3	3.3	3.3	3.3	2.5	1.7	0.8	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

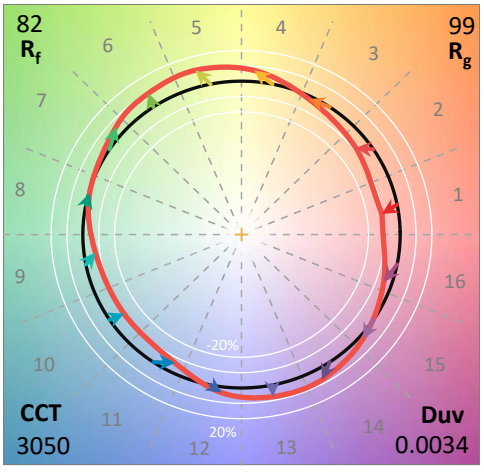
Test Information

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

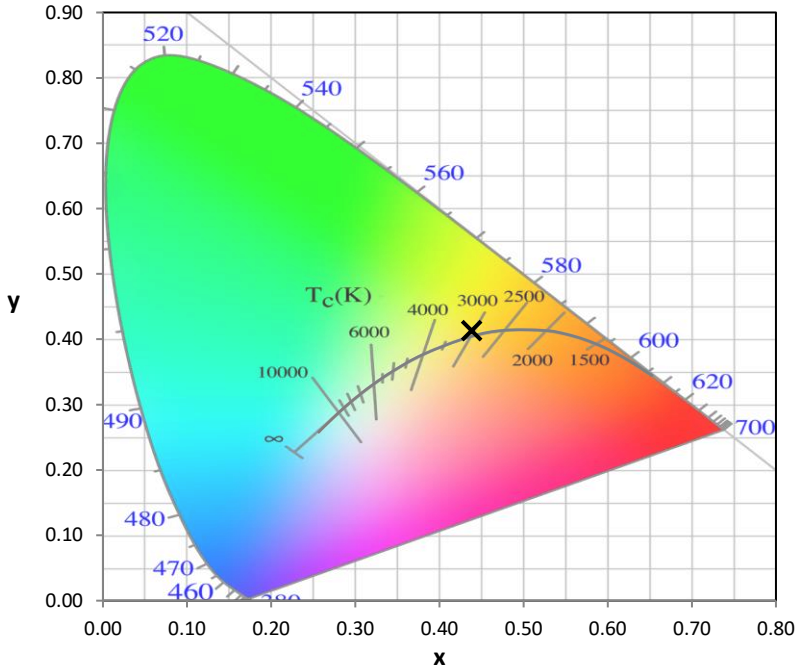
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

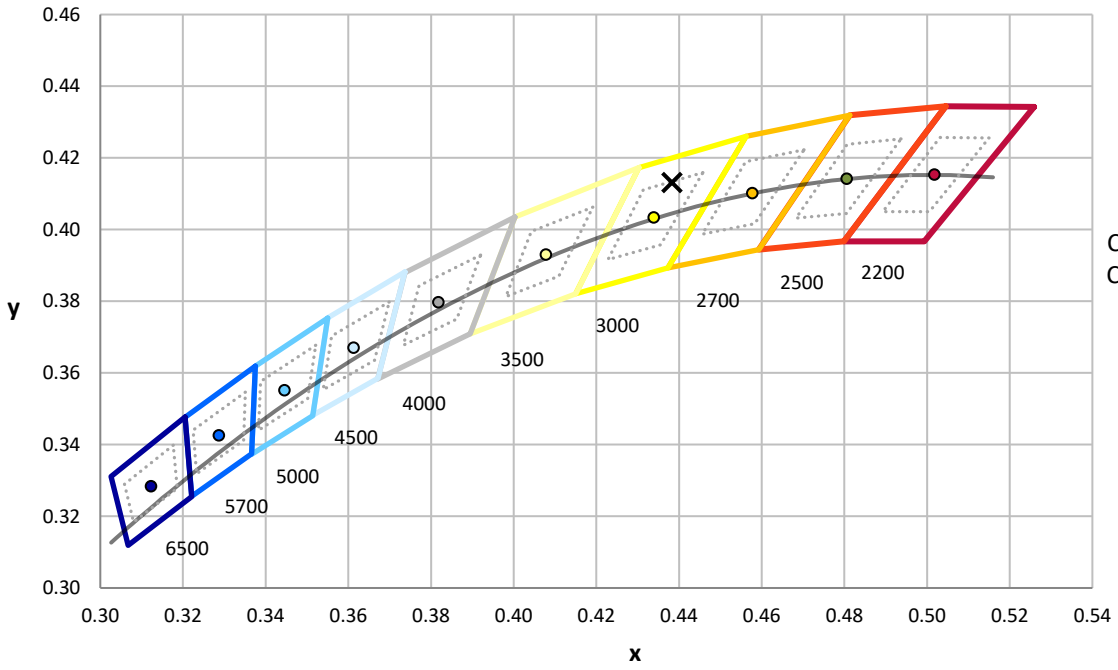
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

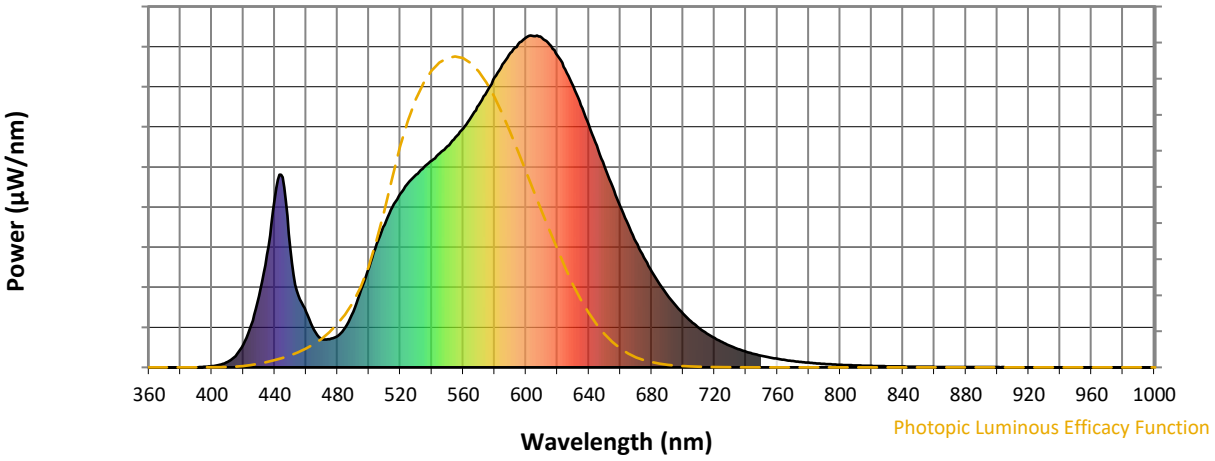


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

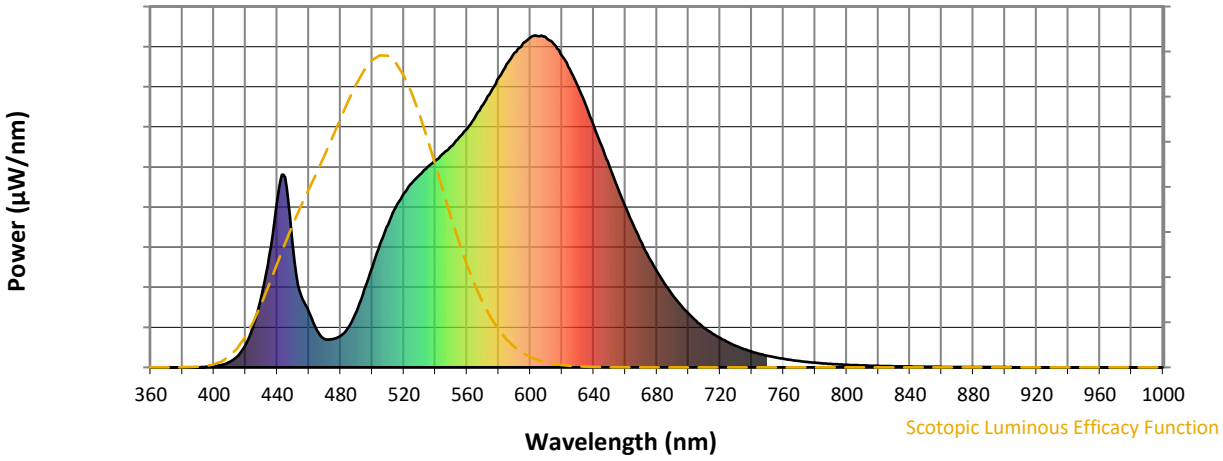


Photopic Lumens: NR

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

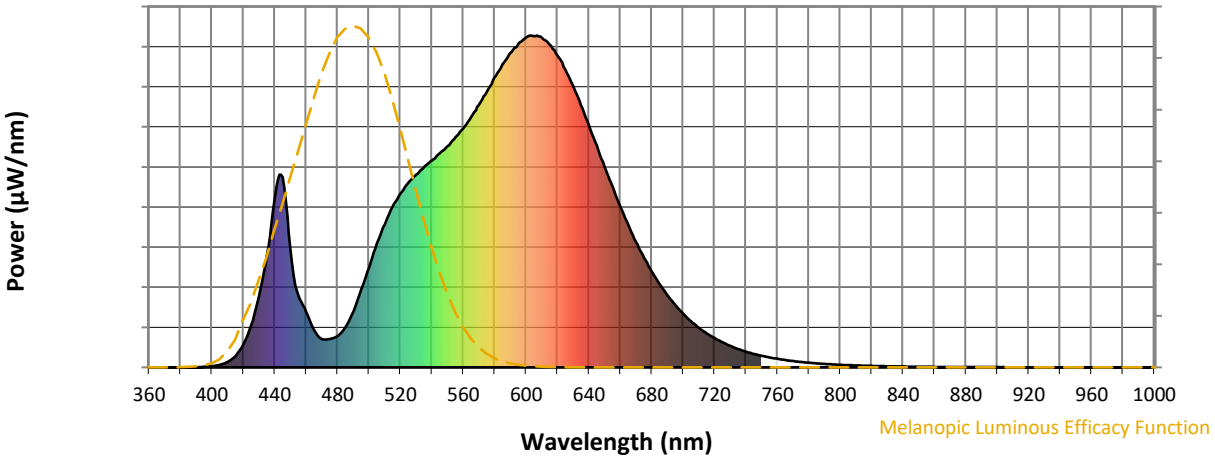


Scotopic Lumens: NR **S/P: 1.27**

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			

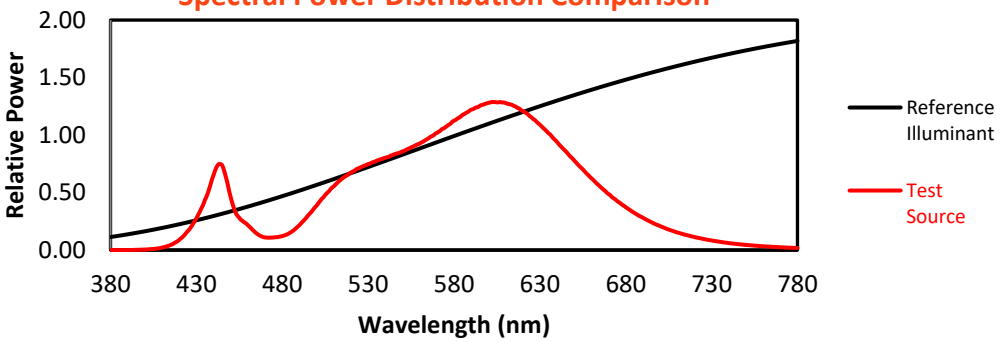
REPORT NUMBER: SP1-2408-195-9

TM-30-18

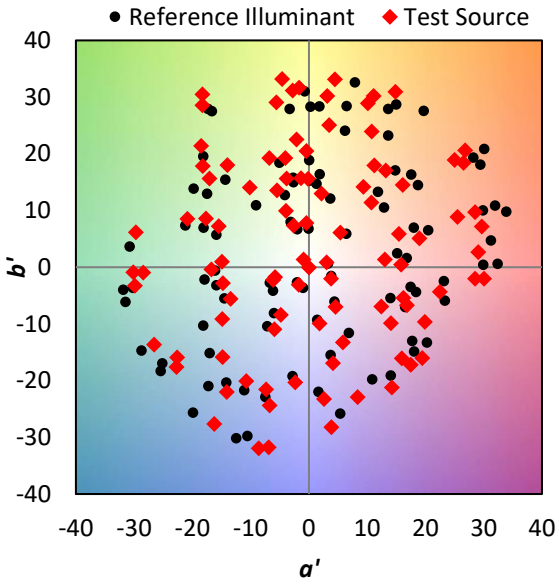
Summary

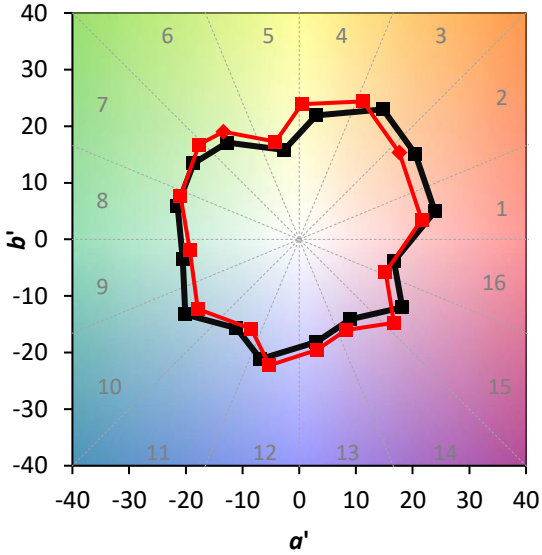
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

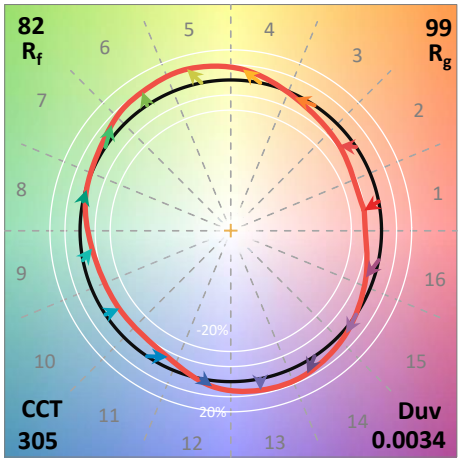
Spectral Power Distribution Comparison

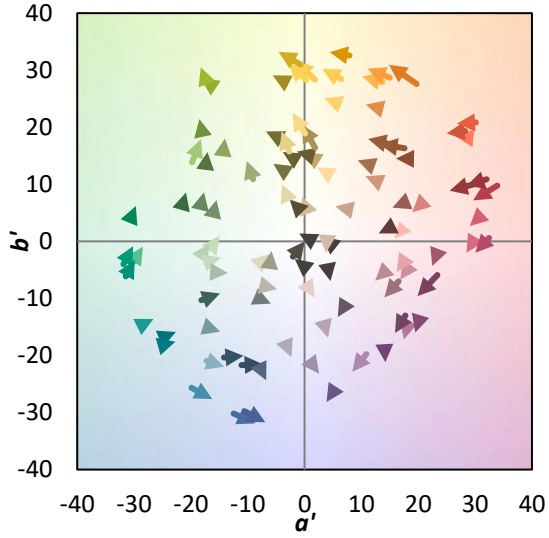


Color Vector Graphics







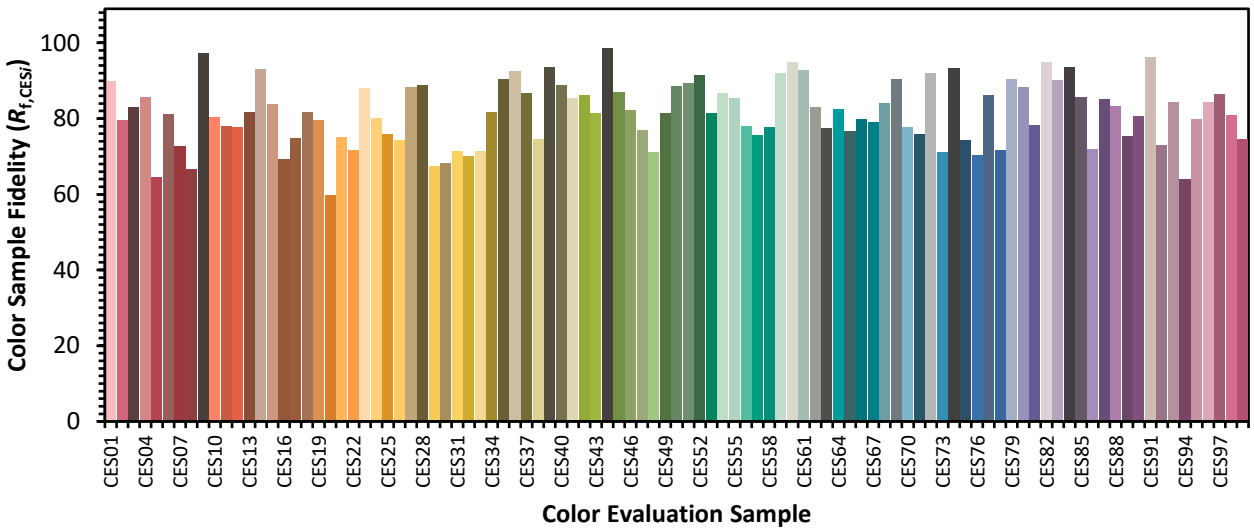


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

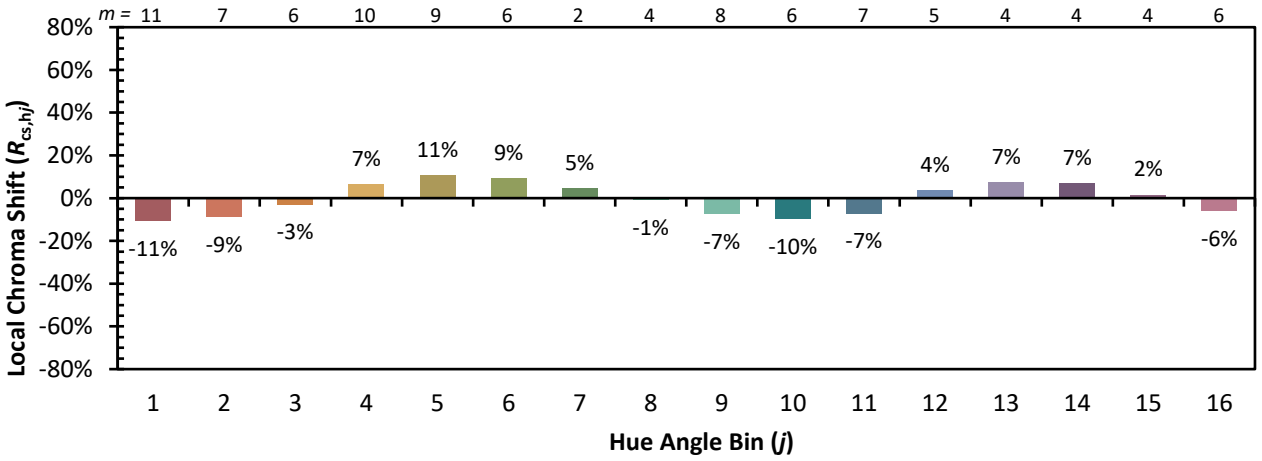
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

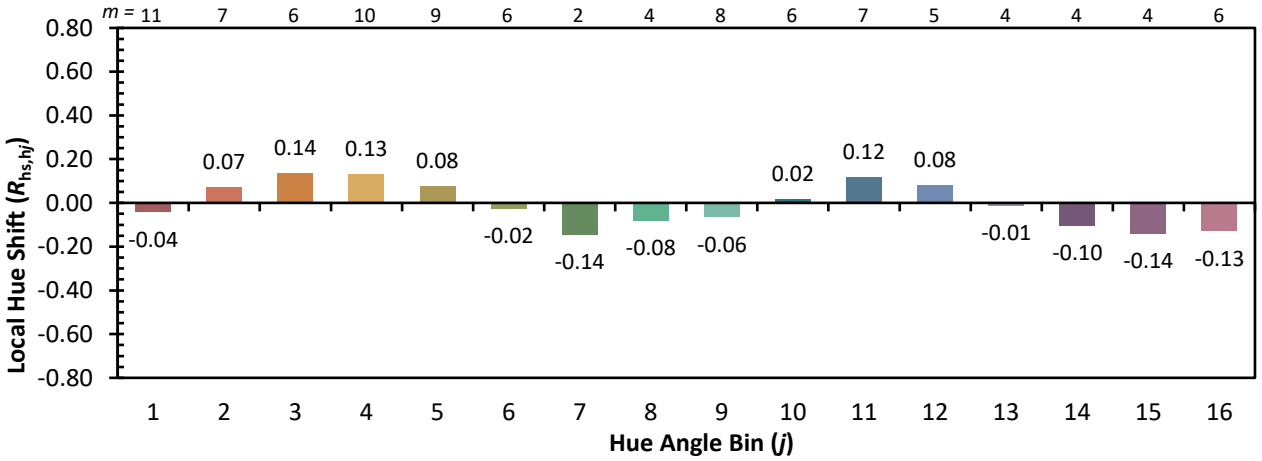


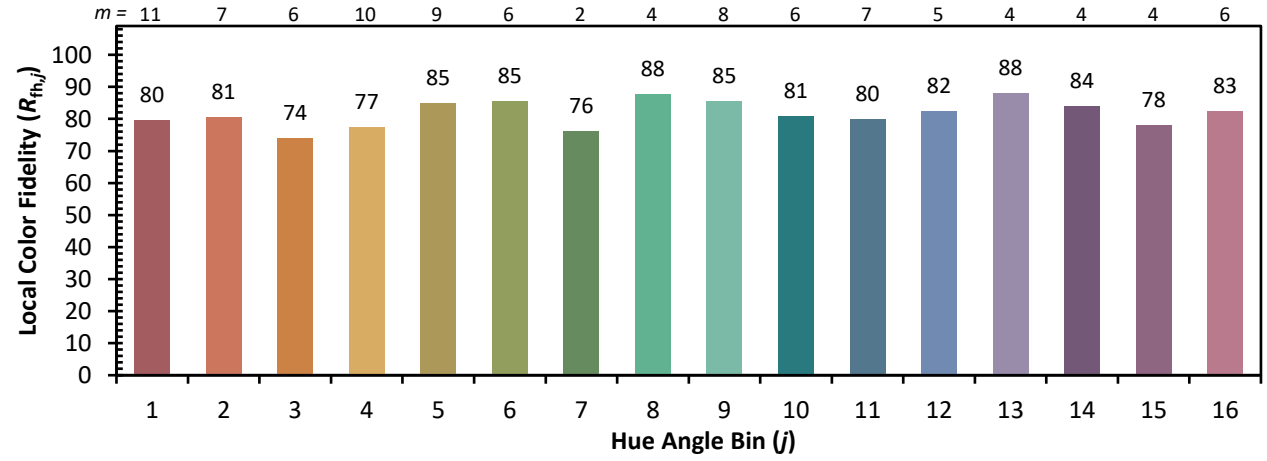
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



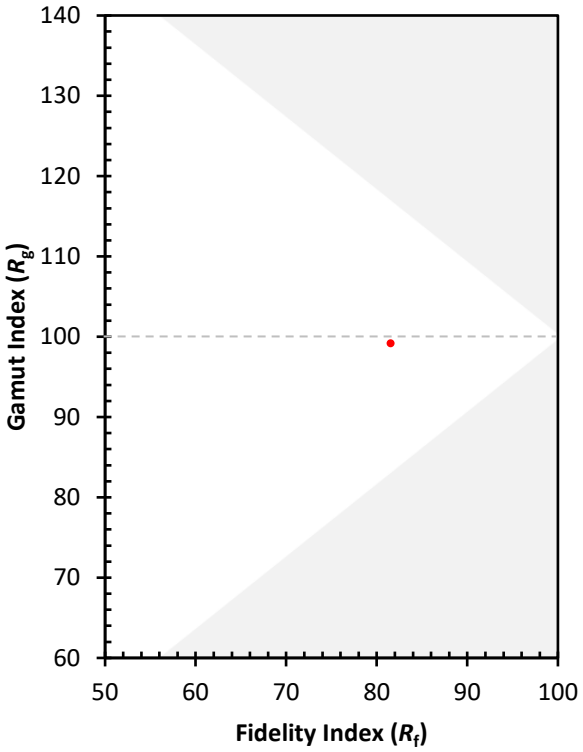


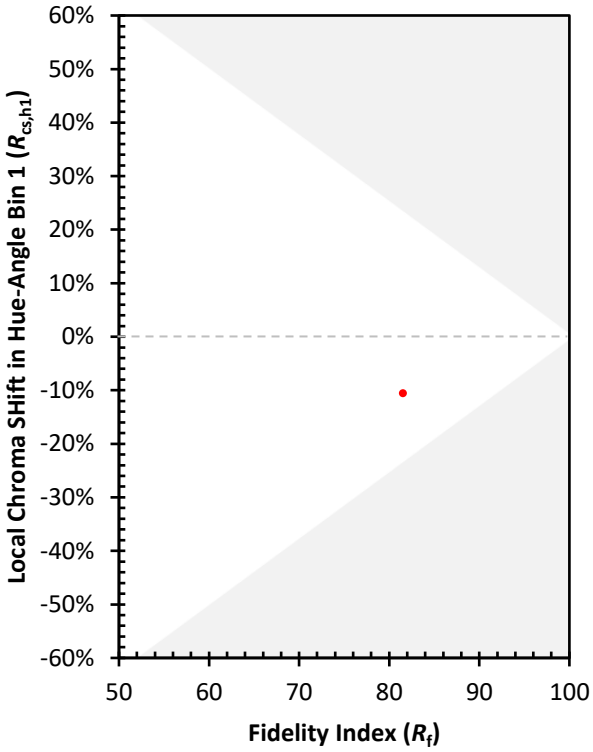


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)