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: P638983

Luminaire Tested: GWS-SA4F-830-U-T2-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:	P638983
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-20)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-T2-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	16055.1 lumens
Efficiency:	N/A
Efficacy:	71.3 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

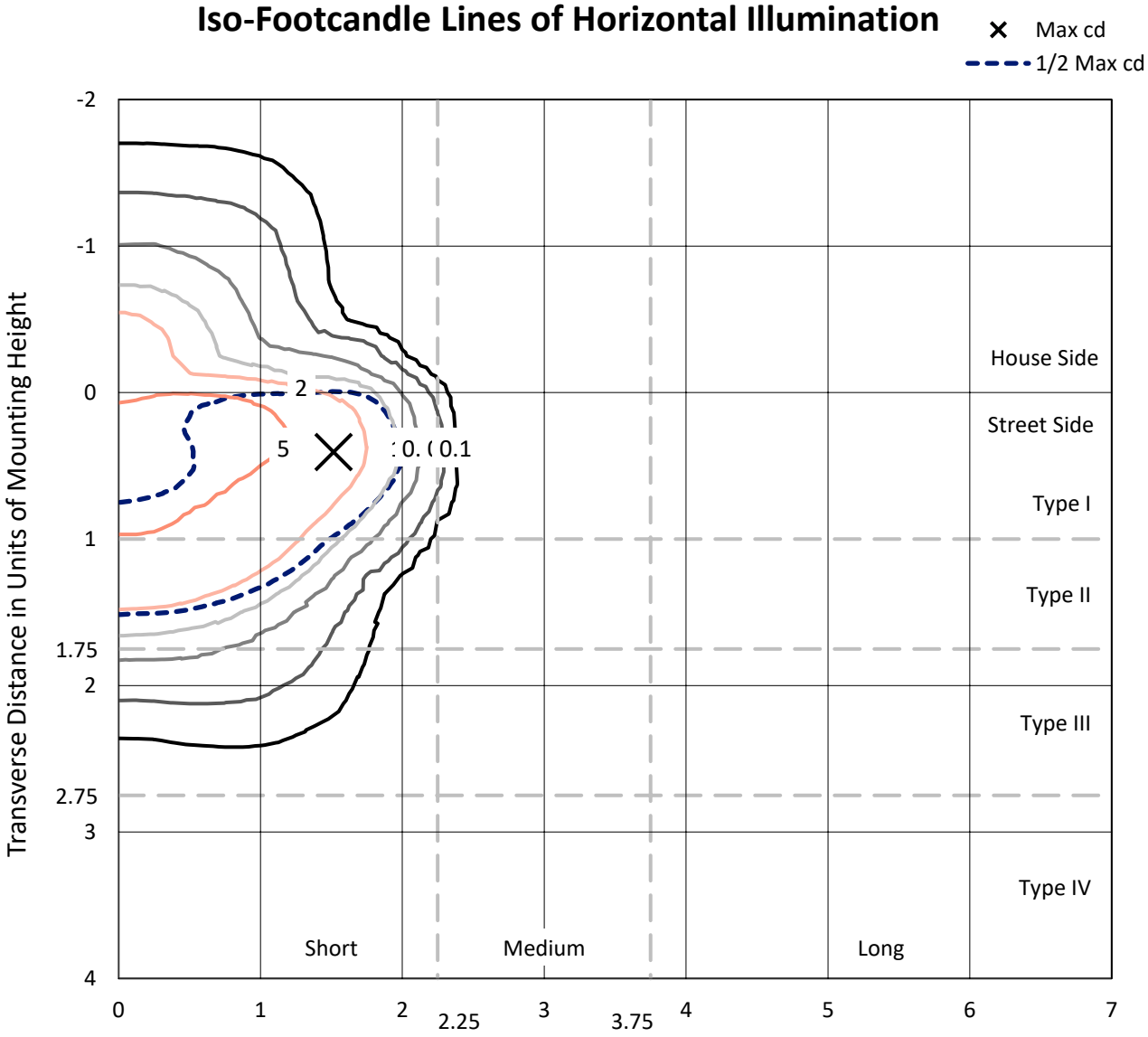
Input Watts (W):	225.3
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P638983
CATALOG NUMBER: GWS-SA4F-830-U-T2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



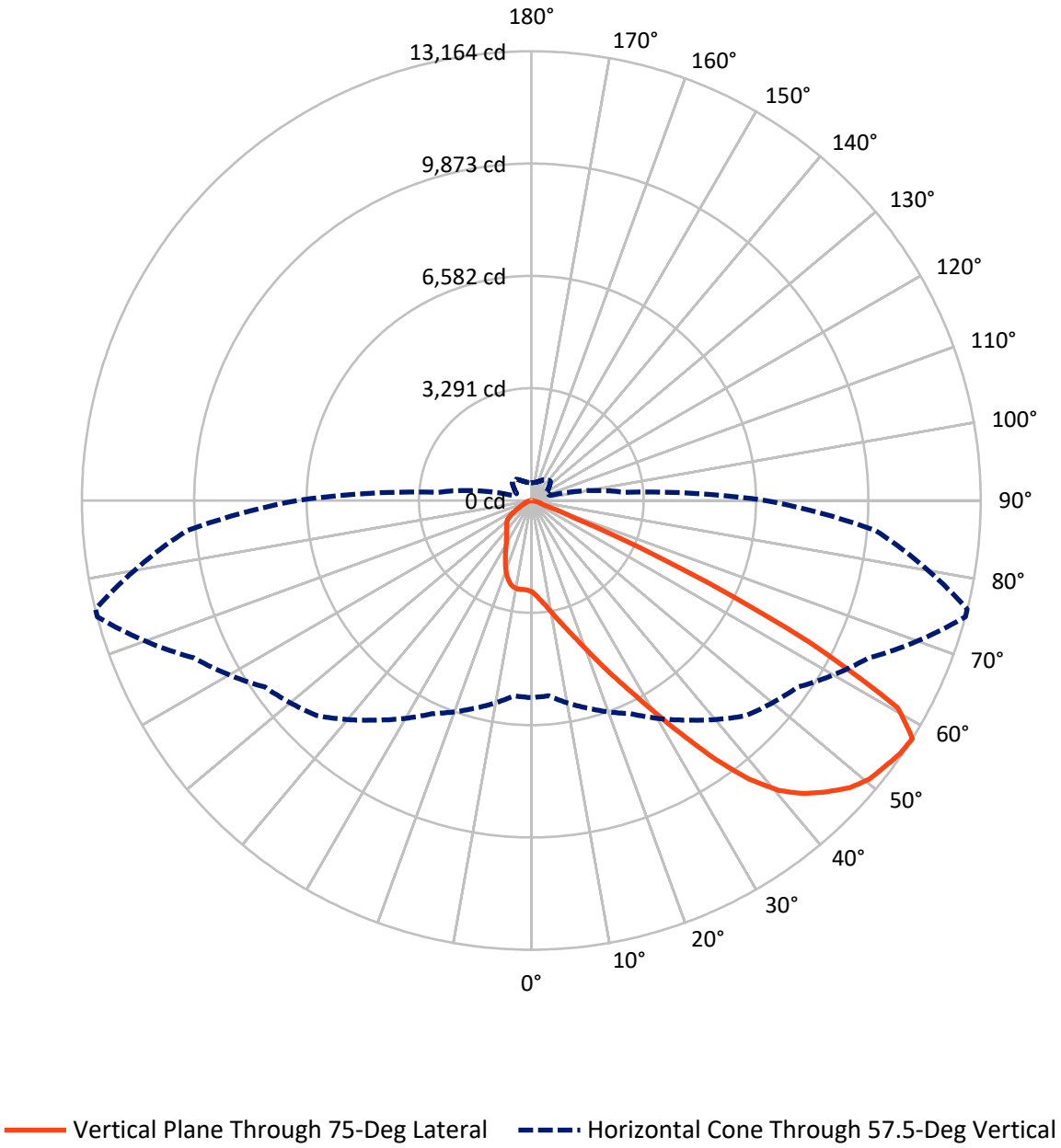
Based on 25 foot mounting height. Maximum calculated value = 8 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P638983
CATALOG NUMBER: GWS-SA4F-830-U-T2-W-GRSBK

Luminous Intensity Polar Plot



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

Scaled Data Report

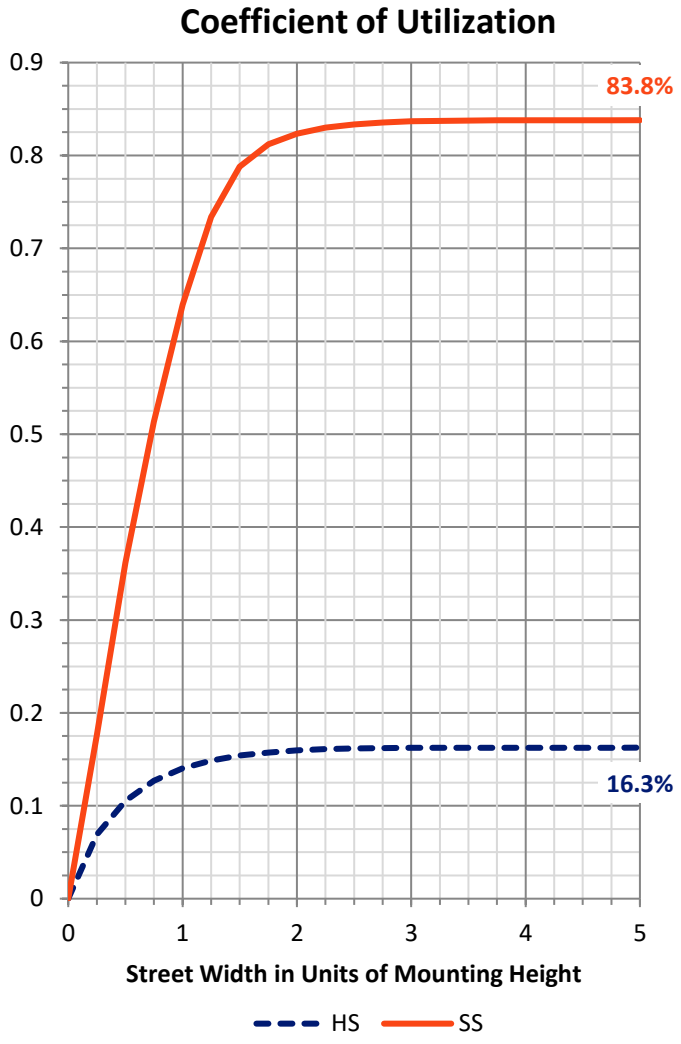
REPORT NUMBER: P638983
CATALOG NUMBER: GWS-SA4F-830-U-T2-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2622.6	0.0	2622.6
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	13432.5	0.0	13432.5
	% Fixture	83.7	0.0	83.7
Total	Lumens	16055.1	0.0	16055.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.5	1.7
10°-20°	885.2	5.5
20°-30°	1620.9	10.1
30°-40°	2689.2	16.8
40°-50°	4107.1	25.6
50°-60°	4615.1	28.7
60°-70°	1702.2	10.6
70°-80°	162.7	1.0
80°-90°	0.1	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°	16055.1	100.0
0°-180°	16055.1	100.0



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

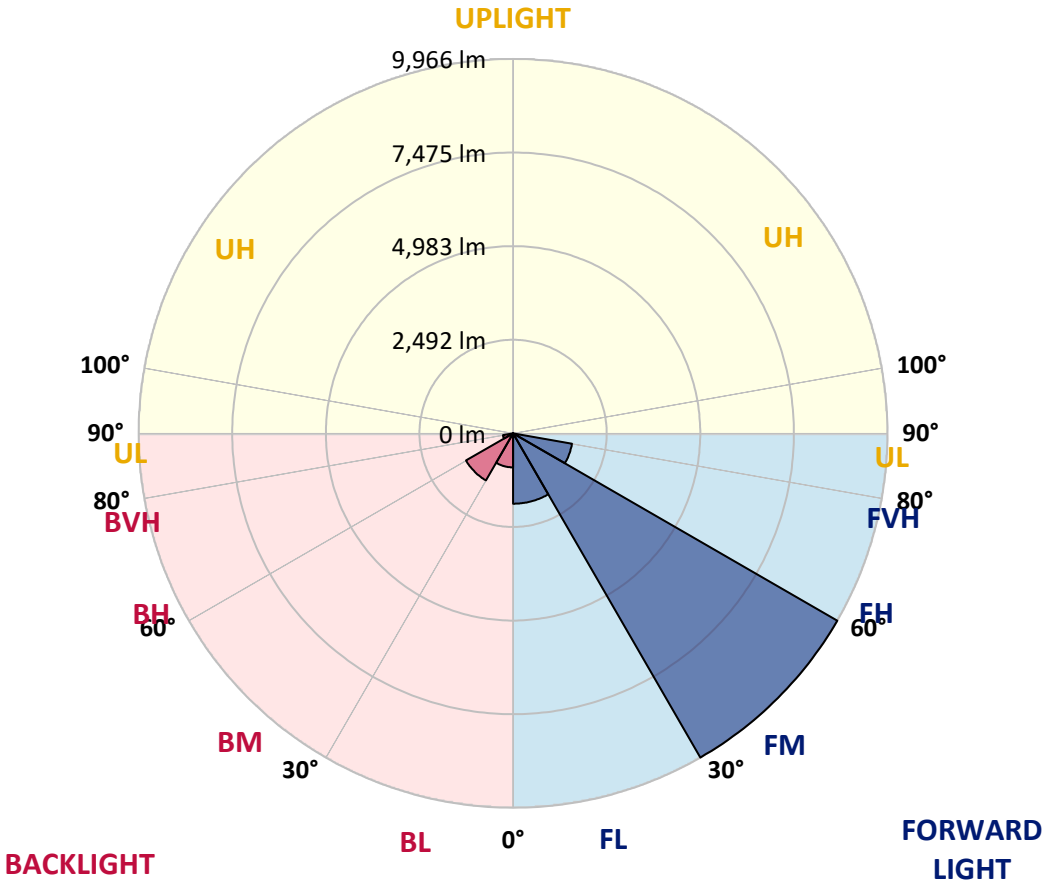
Scaled Data Report

REPORT NUMBER: P638983
CATALOG NUMBER: GWS-SA4F-830-U-T2-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1873.6	11.7			
FM	(30°-60°)	9966.3	62.1			
FH	(60°-80°)	1592.6	9.9			G1/1800
FVH	(80°-90°)	0.1	0.0			G0/10
BL	(0°-30°)	905.0	5.6	B2/1000		
BM	(30°-60°)	1445.2	9.0	B2/2500		
BH	(60°-80°)	272.3	1.7	B1/500		G1/500
BVH	(80°-90°)	0.1	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-G1
Type II Short



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

Scaled Data Report

REPORT NUMBER: P638983
CATALOG NUMBER: GWS-SA4F-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2677.8	2677.8	2677.8	2677.8	2677.8	2677.8	2677.8	2677.8	*2677.8*	2677.8	2677.8
2.5°	2991.7	3022.7	3013.0	2993.6	2982.0	2941.3	2916.1	2842.5	*2790.1*	2784.3	2735.9
5°	3369.5	3363.7	3355.9	3332.7	3313.3	3249.4	3173.8	3049.8	*2939.3*	2925.8	2823.1
7.5°	3576.8	3580.7	3584.6	3580.7	3567.1	3518.7	3435.4	3290.0	*3121.5*	3109.9	2947.1
10°	3662.1	3669.8	3689.2	3726.0	3758.9	3755.1	3706.6	3557.4	*3350.1*	3330.7	3111.8
12.5°	3702.8	3712.4	3743.4	3813.2	3902.3	3972.1	3979.8	3846.1	*3617.5*	3586.5	3307.5
15°	3758.9	3768.6	3807.4	3898.5	4028.3	4165.8	4255.0	4169.7	*3914.0*	3881.0	3522.6
17.5°	3784.1	3797.7	3853.9	3974.0	4142.6	4353.8	4555.3	4547.6	*4264.7*	4239.5	3772.5
20°	3832.6	3842.3	3892.6	4022.5	4225.9	4530.1	4869.2	4991.3	*4692.9*	4656.1	4074.8
22.5°	3985.6	3989.5	4012.8	4094.2	4284.0	4658.0	5188.9	5508.6	*5198.6*	5150.1	4413.9
25°	4235.6	4233.7	4243.4	4256.9	4396.4	4787.8	5497.0	6091.8	*5777.9*	5725.6	4797.5
27.5°	4553.4	4553.4	4576.6	4537.9	4594.1	4948.6	5801.2	6762.2	*6452.2*	6378.6	5218.0
30°	4927.3	4925.4	4979.6	4917.6	4935.1	5202.5	6128.6	7492.7	*7266.0*	7174.9	5702.4
32.5°	5435.0	5423.4	5485.4	5400.1	5342.0	5586.1	6527.8	8256.1	*8240.6*	8101.1	6310.8
35°	6076.3	6056.9	6076.3	5993.0	5888.4	6122.8	7050.9	9017.6	*9321.8*	9174.5	7035.4
37.5°	6713.8	6775.8	6797.1	6653.7	6568.5	6802.9	7680.7	9699.6	*10354.5*	10201.5	7789.2
40°	7465.6	7446.2	7519.8	7359.0	7304.8	7564.4	8296.8	10207.3	*11172.2*	11026.9	8459.6
42.5°	8019.7	8054.6	8145.7	8056.6	8013.9	8258.1	8814.2	10503.7	*11739.9*	11596.6	8938.2
45°	8684.3	8709.5	8744.4	8670.8	8626.2	8866.5	9188.1	10633.6	*12172.0*	12017.0	9259.8
47.5°	9403.2	9422.6	9422.6	9271.4	9128.0	9226.9	9438.1	10707.2	*12569.2*	12420.0	9498.1
50°	9918.6	9928.3	10013.5	9907.0	9595.0	9441.9	9552.4	10778.9	*12832.7*	12693.2	9575.6
52.5°	9461.3	9449.7	9730.6	9951.5	10034.8	9730.6	9750.0	10883.5	*12960.6*	12840.5	9637.6
55°	7967.4	7948.0	8343.3	8880.0	9614.4	10003.8	9988.3	10945.5	*13102.1*	13028.4	9862.4
57.5°	*5776.0*	*5743.1*	*6293.3*	*6890.1*	*7853.1*	*8909.1*	*9529.1*	*10910.6*	*13164.1*	*13158.3*	*10124.0*
60°	3472.2	3445.1	3964.3	4592.1	5336.2	6398.0	7426.8	9773.3	*12334.8*	12346.4	9443.9
62.5°	2137.2	2162.4	2631.3	2951.0	3228.0	3547.8	4142.6	6574.3	*9137.7*	9213.3	6636.3
65°	1437.7	1457.1	1891.1	2294.1	2294.1	1875.6	1610.1	3142.8	*4875.0*	4747.1	3138.9
67.5°	964.9	986.2	1329.2	1800.0	1867.8	1307.9	653.0	937.8	*1358.3*	1317.6	777.0
70°	567.7	591.0	885.5	1234.3	1360.2	910.7	436.0	397.2	*385.6*	374.0	302.3
72.5°	253.8	263.5	451.5	627.8	573.5	383.6	308.1	317.8	*300.3*	294.5	246.1
75°	77.5	81.4	116.3	135.6	137.6	137.6	186.0	250.0	*236.4*	238.3	189.9
77.5°	19.4	19.4	31.0	29.1	15.5	13.6	34.9	56.2	*58.1*	52.3	38.8
80°	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	*1.9*	1.9	1.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*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

Scaled Data Report

REPORT NUMBER: P638983
CATALOG NUMBER: GWS-SA4F-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2677.8	2677.8	2677.8	2677.8	2677.8	2677.8	2677.8	2677.8	2677.8	2677.8	2677.8
2.5°	2714.6	2664.2	2631.3	2584.8	2551.8	2516.9	2485.9	2460.8	2447.2	2443.3	2445.3
5°	2776.6	2697.1	2619.6	2530.5	2468.5	2410.4	2363.9	2327.1	2309.6	2303.8	2303.8
7.5°	2871.5	2761.1	2623.5	2484.0	2379.4	2288.3	2234.1	2193.4	2177.9	2174.0	2162.4
10°	2995.5	2844.4	2617.7	2400.7	2253.4	2158.5	2119.7	2108.1	2113.9	2115.9	2113.9
12.5°	3144.7	2931.6	2580.9	2278.6	2119.7	2061.6	2065.5	2096.5	2131.4	2148.8	2152.7
15°	3303.6	3011.0	2497.6	2133.3	2005.4	2003.5	2059.7	2131.4	2199.2	2228.2	2236.0
17.5°	3481.9	3075.0	2369.7	1978.3	1906.6	1962.8	2063.5	2174.0	2265.1	2313.5	2323.2
20°	3677.6	3127.3	2206.9	1833.0	1819.4	1920.2	2059.7	2195.3	2307.7	2361.9	2371.6
22.5°	3881.0	3164.1	2019.0	1699.3	1740.0	1871.7	2022.9	2154.6	2261.2	2323.2	2330.9
25°	4113.5	3168.0	1827.2	1586.9	1666.3	1805.8	1933.7	2042.2	2131.4	2185.6	2191.4
27.5°	4317.0	3121.5	1656.7	1495.8	1598.5	1724.5	1809.7	1869.8	1931.8	1962.8	1964.7
30°	4551.4	3040.1	1495.8	1422.2	1528.8	1623.7	1666.3	1679.9	1685.7	1691.5	1683.8
32.5°	4830.4	2941.3	1375.7	1350.5	1449.3	1513.3	1524.9	1497.8	1464.8	1418.3	1406.7
35°	5173.4	2852.2	1276.9	1280.8	1362.1	1400.9	1391.2	1333.1	1269.1	1212.9	1203.3
37.5°	5545.4	2776.6	1201.3	1212.9	1267.2	1294.3	1265.3	1201.3	1172.2	1123.8	1125.7
40°	5874.8	2714.6	1133.5	1145.1	1170.3	1195.5	1149.0	1106.4	1160.6	1156.7	1160.6
42.5°	6109.3	2662.3	1075.4	1069.6	1087.0	1104.4	1069.6	1048.2	1139.3	1114.1	1127.7
45°	6246.8	2613.8	1026.9	992.1	1019.2	1050.2	1026.9	999.8	1030.8	914.5	904.9
47.5°	6339.8	2586.7	984.3	916.5	964.9	1019.2	970.7	904.9	860.3	759.5	751.8
50°	6349.5	2573.1	933.9	839.0	901.0	959.1	902.9	811.9	747.9	703.3	697.5
52.5°	6399.9	2600.3	864.2	740.2	808.0	901.0	862.2	771.2	684.0	645.2	637.5
55°	6624.7	2714.6	747.9	604.5	703.3	856.4	829.3	687.8	604.5	581.3	575.5
57.5°	*6857.2*	*2737.8*	*589.0*	*478.6*	*612.3*	*792.5*	*757.6*	*633.6*	*552.2*	*525.1*	*519.3*
60°	6270.1	2255.4	441.8	395.3	540.6	732.4	701.4	600.7	505.7	472.8	467.0
62.5°	4119.3	1218.8	350.7	335.2	455.3	620.0	639.4	542.5	451.5	416.6	414.6
65°	1898.9	565.8	269.3	265.5	356.5	494.1	550.3	474.7	381.7	350.7	350.7
67.5°	517.3	281.0	211.2	195.7	242.2	331.3	401.1	354.6	271.3	234.4	232.5
70°	257.7	226.7	189.9	168.6	174.4	205.4	236.4	197.6	137.6	112.4	110.4
72.5°	211.2	186.0	160.8	143.4	131.8	125.9	122.1	98.8	63.9	48.4	46.5
75°	156.9	133.7	114.3	93.0	79.4	73.6	65.9	48.4	27.1	15.5	13.6
77.5°	34.9	32.9	31.0	23.3	21.3	17.4	13.6	9.7	3.9	0.0	0.0
80°	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

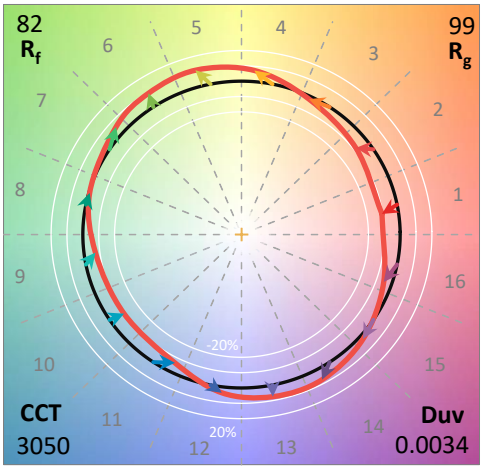
Test Information

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

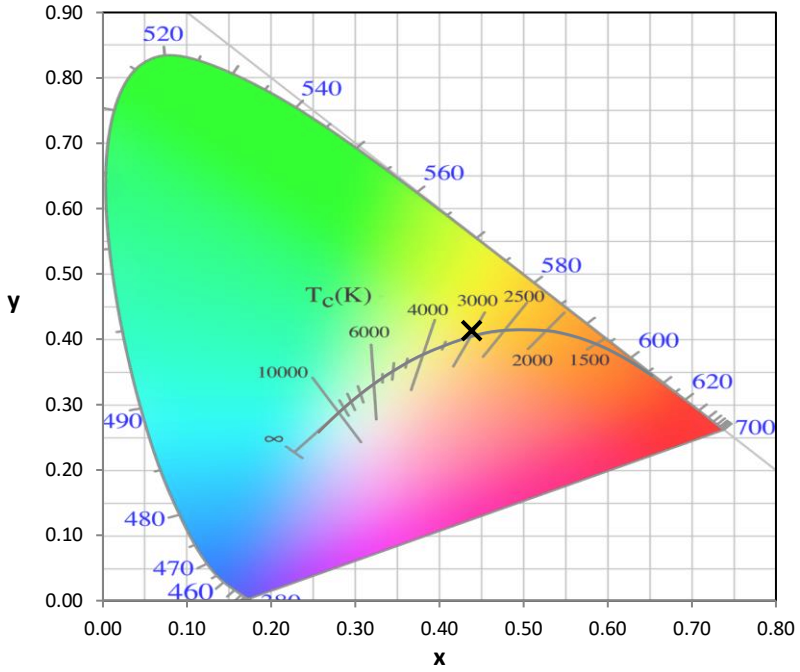
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

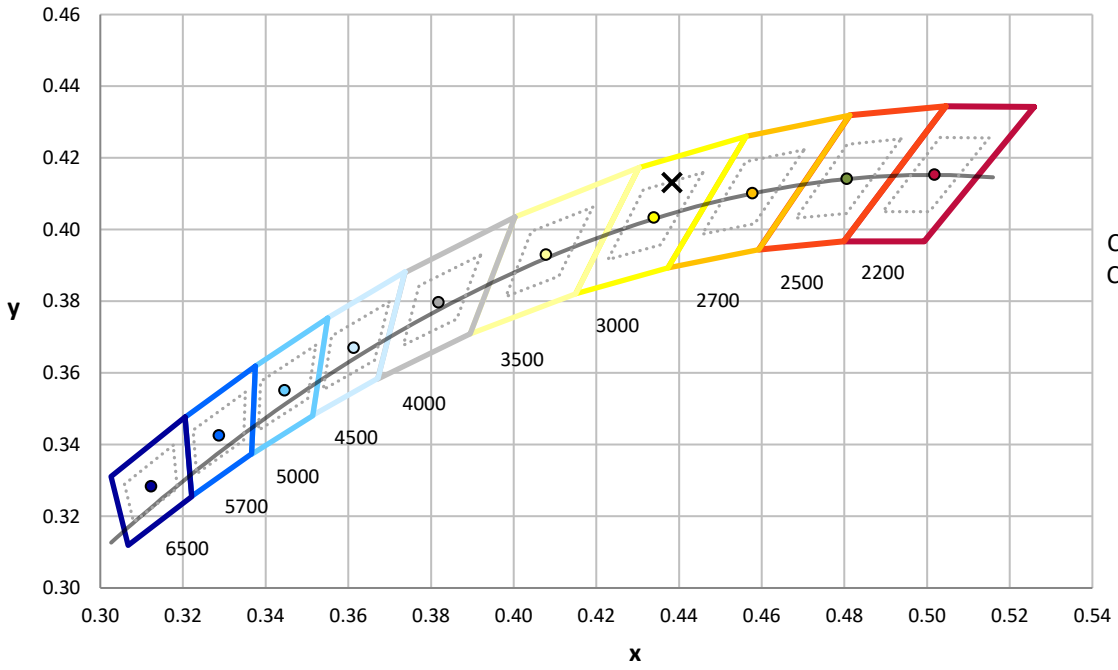
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

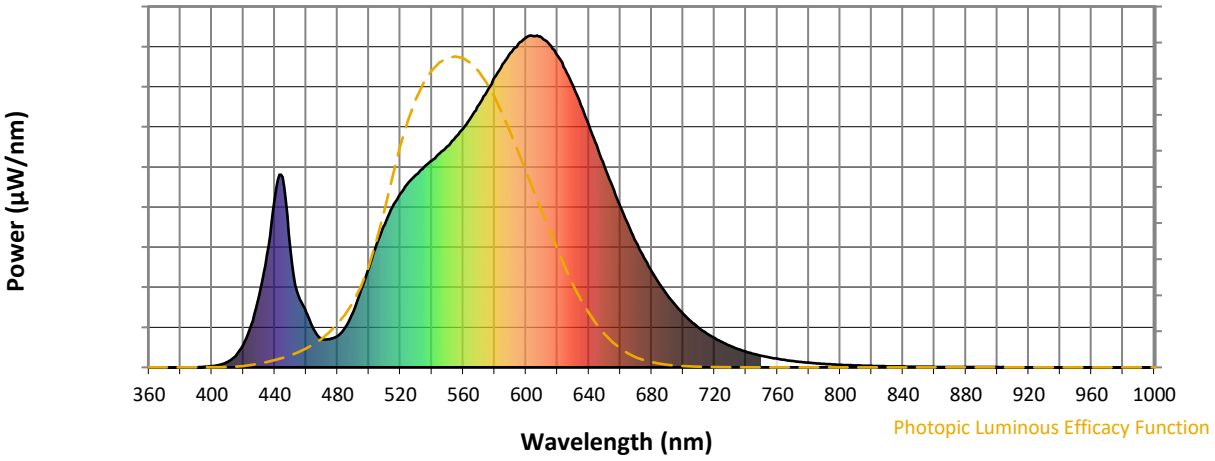


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

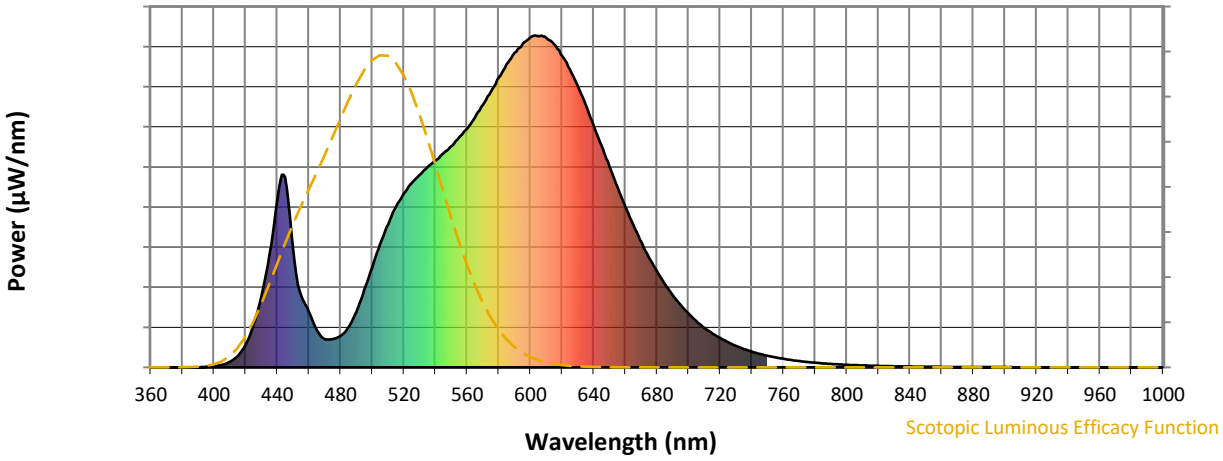


Photopic Lumens: NR

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

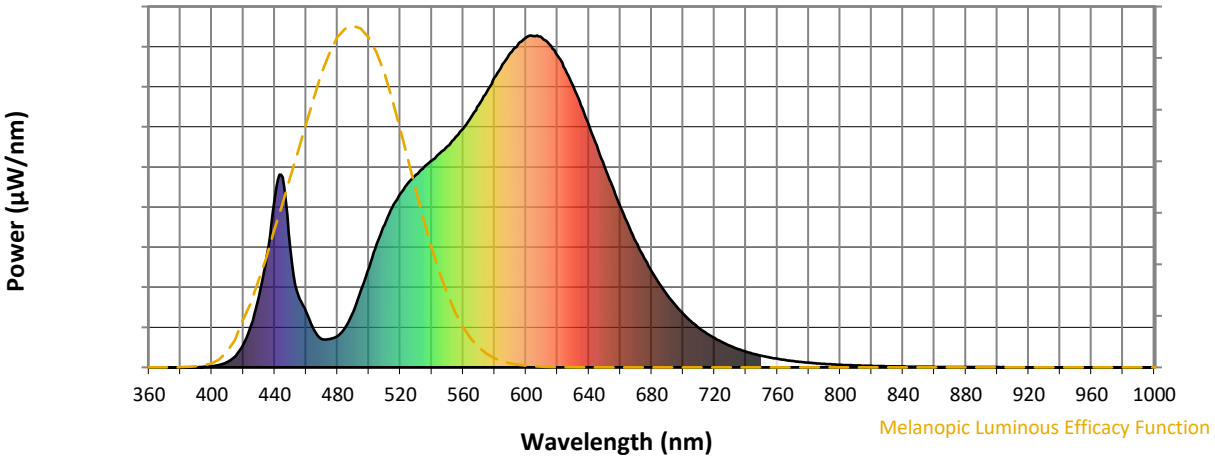


Scotopic Lumens: NR **S/P: 1.27**

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			

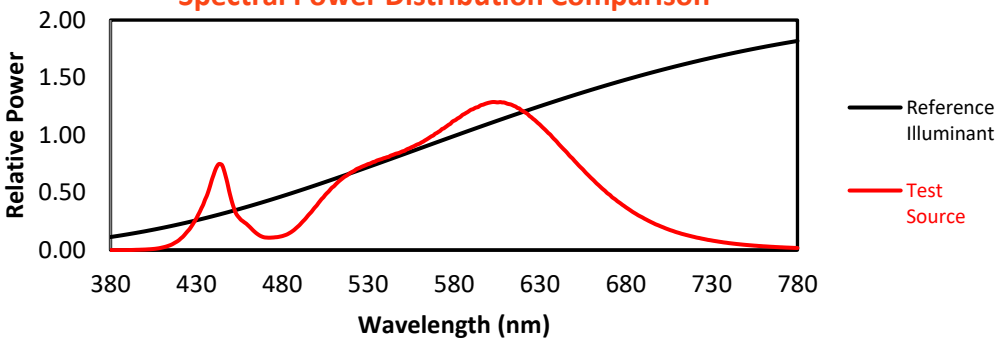
REPORT NUMBER: SP1-2408-195-9

TM-30-18

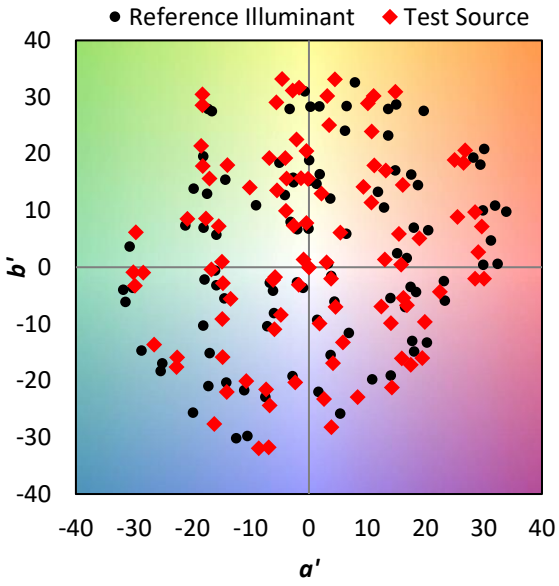
Summary

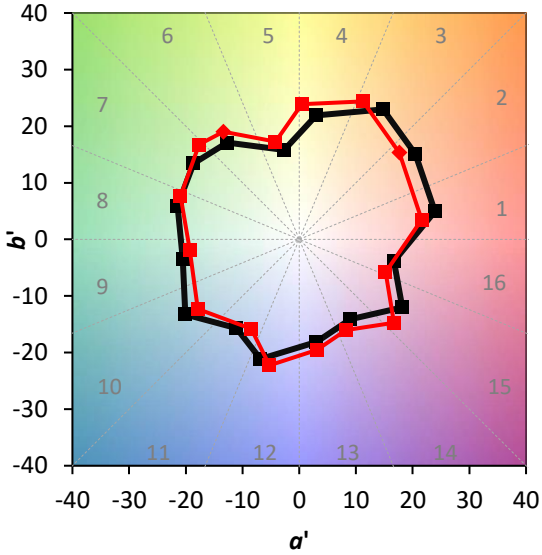
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

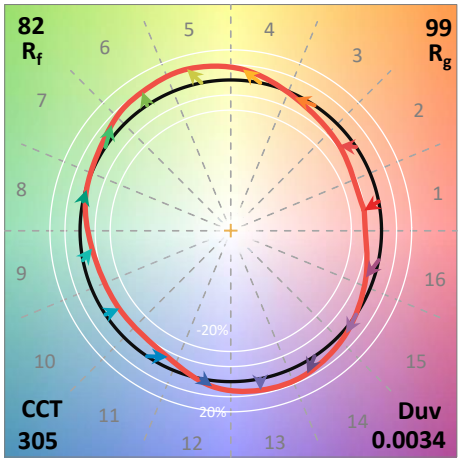
Spectral Power Distribution Comparison

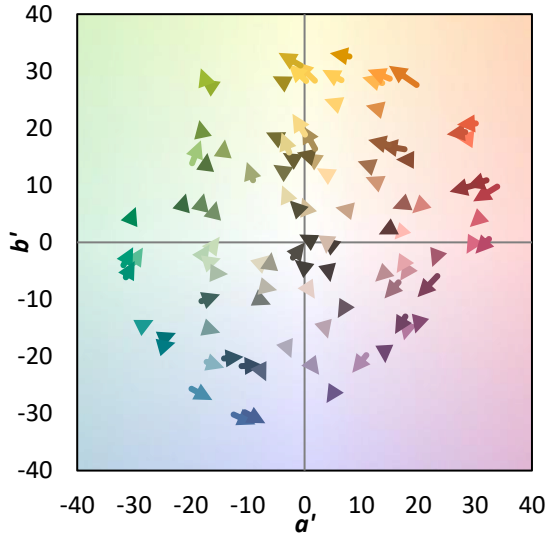


Color Vector Graphics







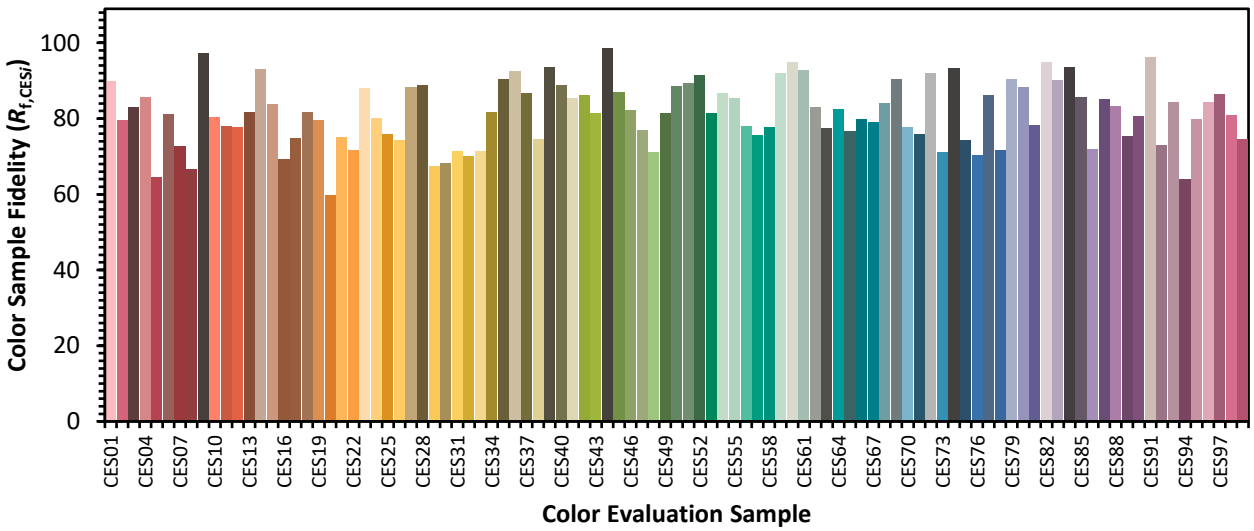


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

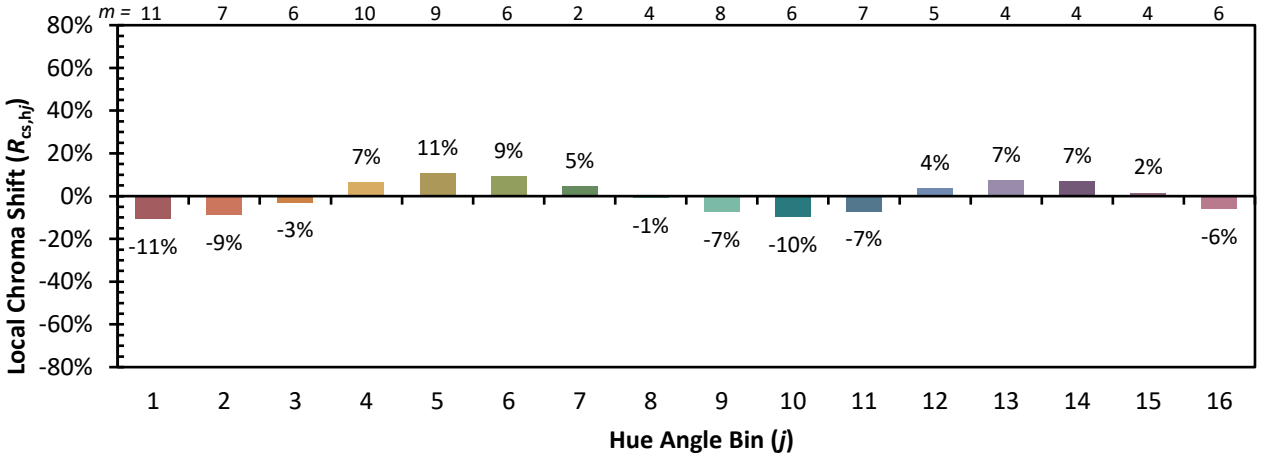
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

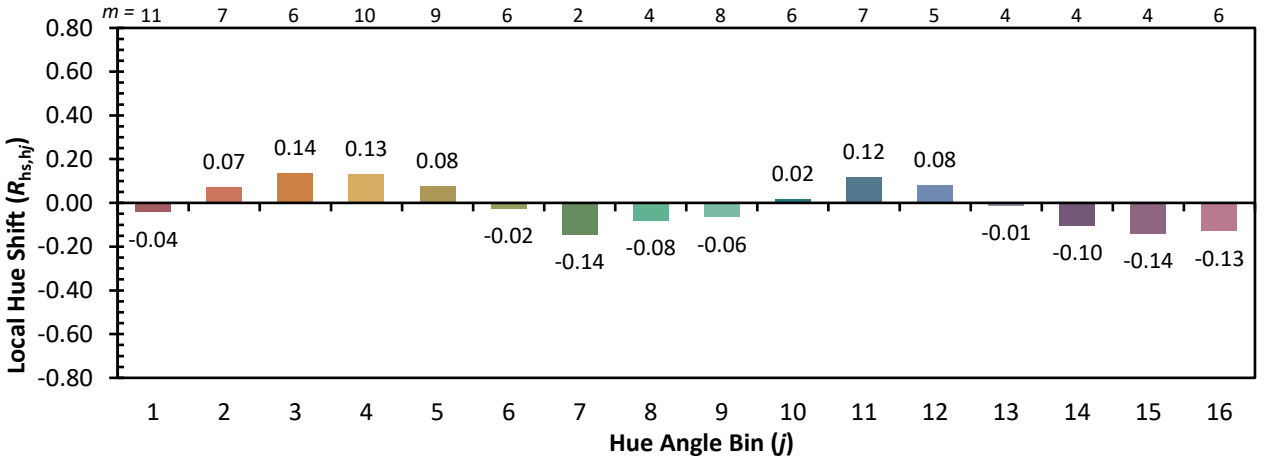


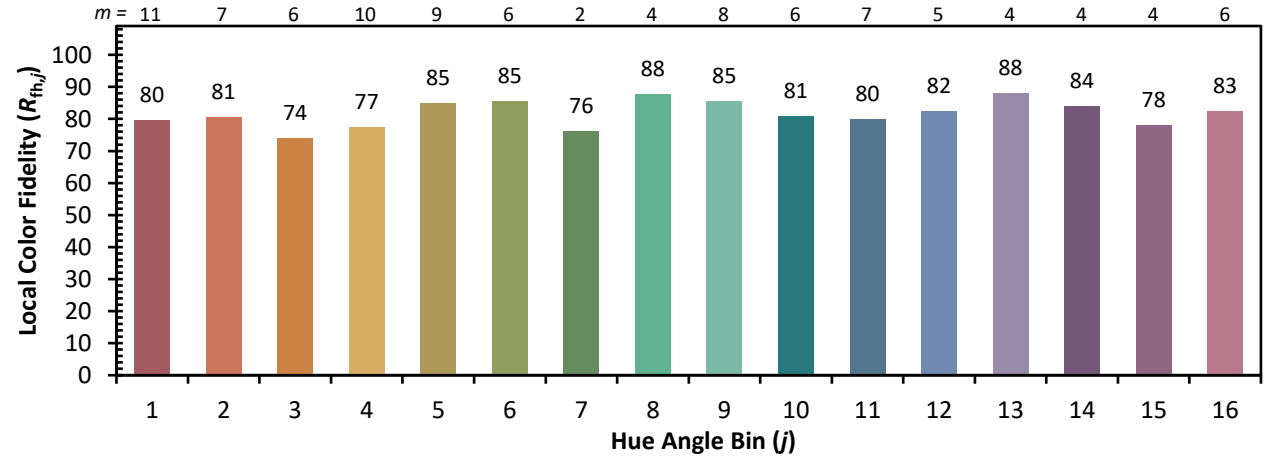
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



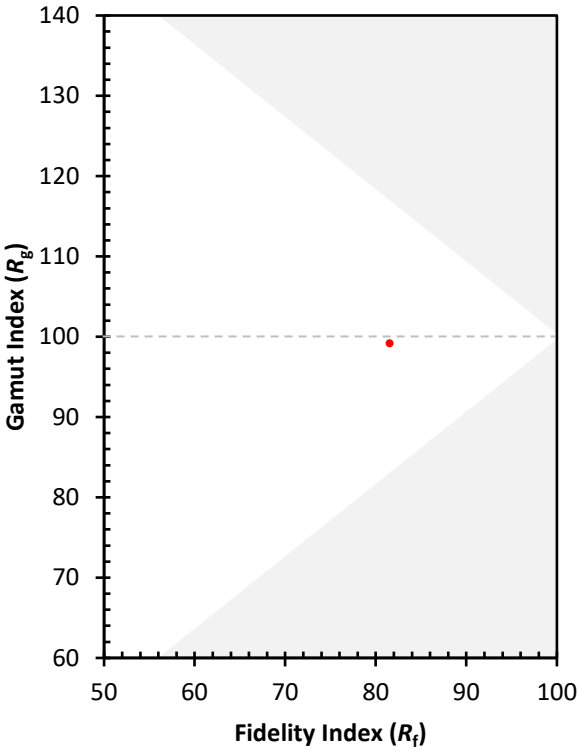


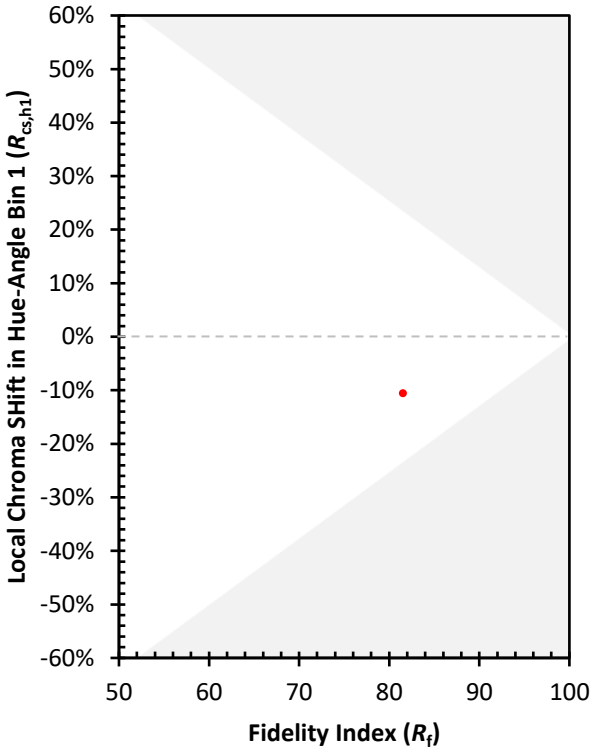


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)