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: P639480

Luminaire Tested: GWS-SA5B-830-U-T2-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:	P639480
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-22)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5B-830-U-T2-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	10565.5 lumens
Efficiency:	N/A
Efficacy:	91.3 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

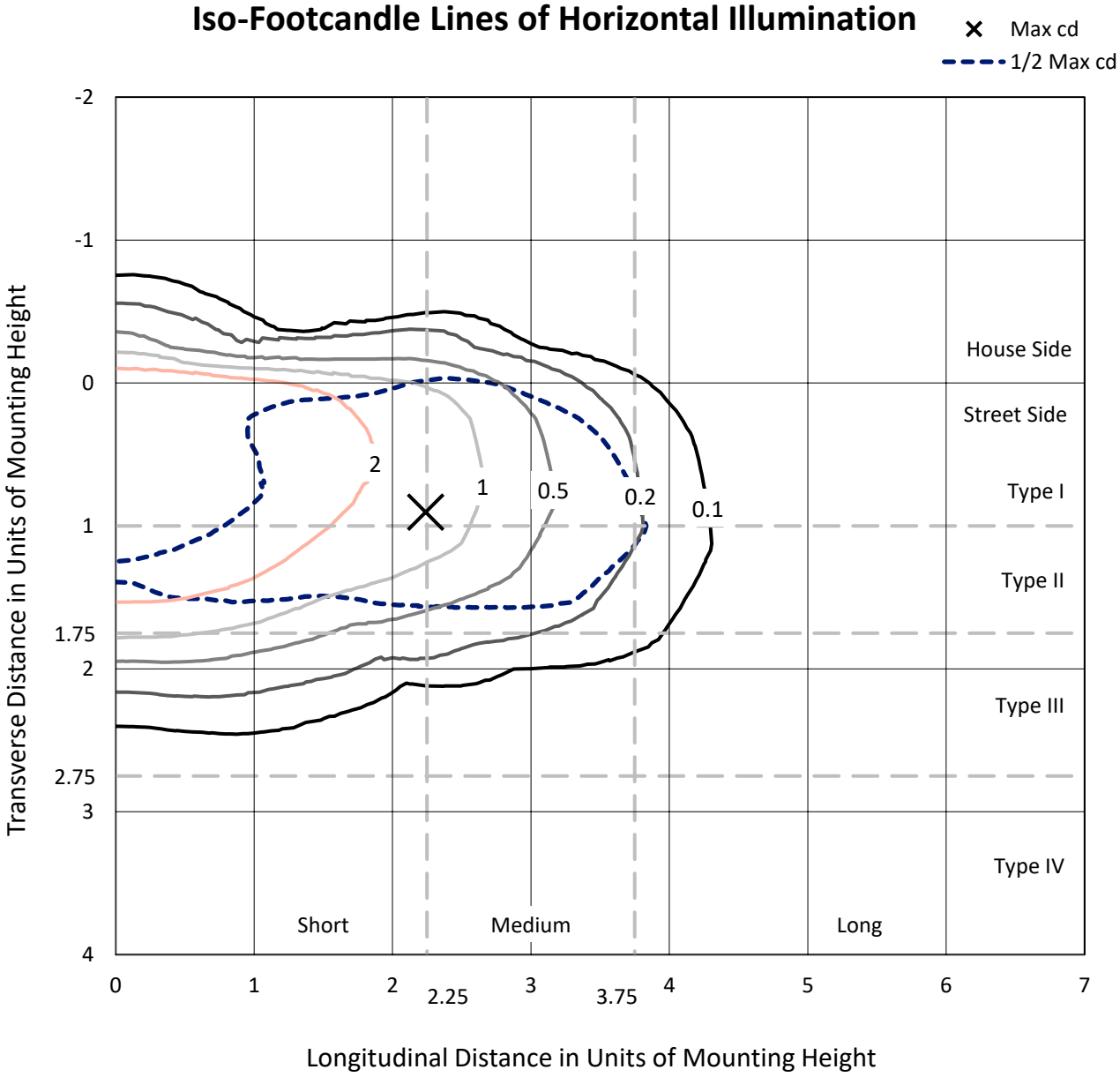
Input Watts (W):	115.7
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P639480
CATALOG NUMBER: GWS-SA5B-830-U-T2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



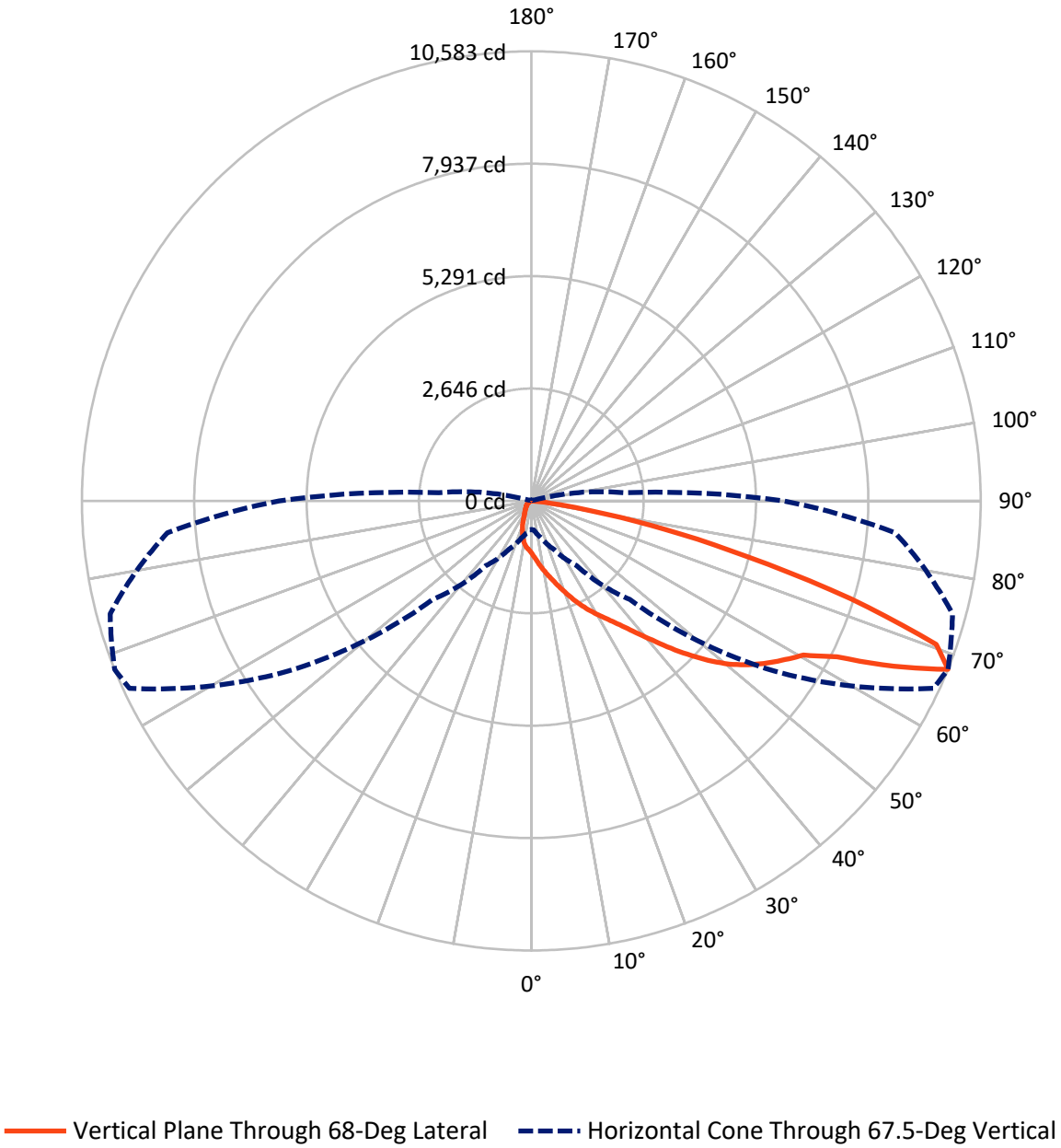
Based on 20 foot mounting height. Maximum calculated value = 5 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P639480
CATALOG NUMBER: GWS-SA5B-830-U-T2-W-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

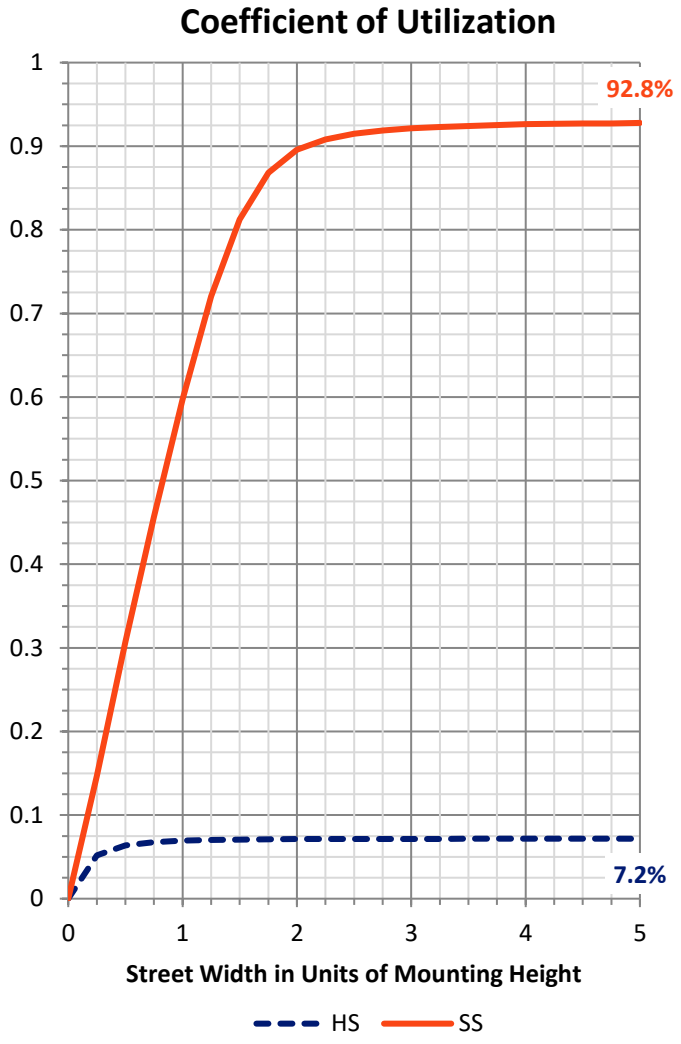
REPORT NUMBER: P639480
CATALOG NUMBER: GWS-SA5B-830-U-T2-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	763.0	0.0	763.0
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	9802.5	0.0	9802.5
	% Fixture	92.8	0.0	92.8
Total	Lumens	10565.5	0.0	10565.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.9	1.1
10°-20°	344.4	3.3
20°-30°	591.8	5.6
30°-40°	1028.9	9.7
40°-50°	1795.4	17.0
50°-60°	2707.9	25.6
60°-70°	2715.3	25.7
70°-80°	1198.0	11.3
80°-90°	64.0	0.6
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°	10565.5	100.0
0°-180°	10565.5	100.0



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

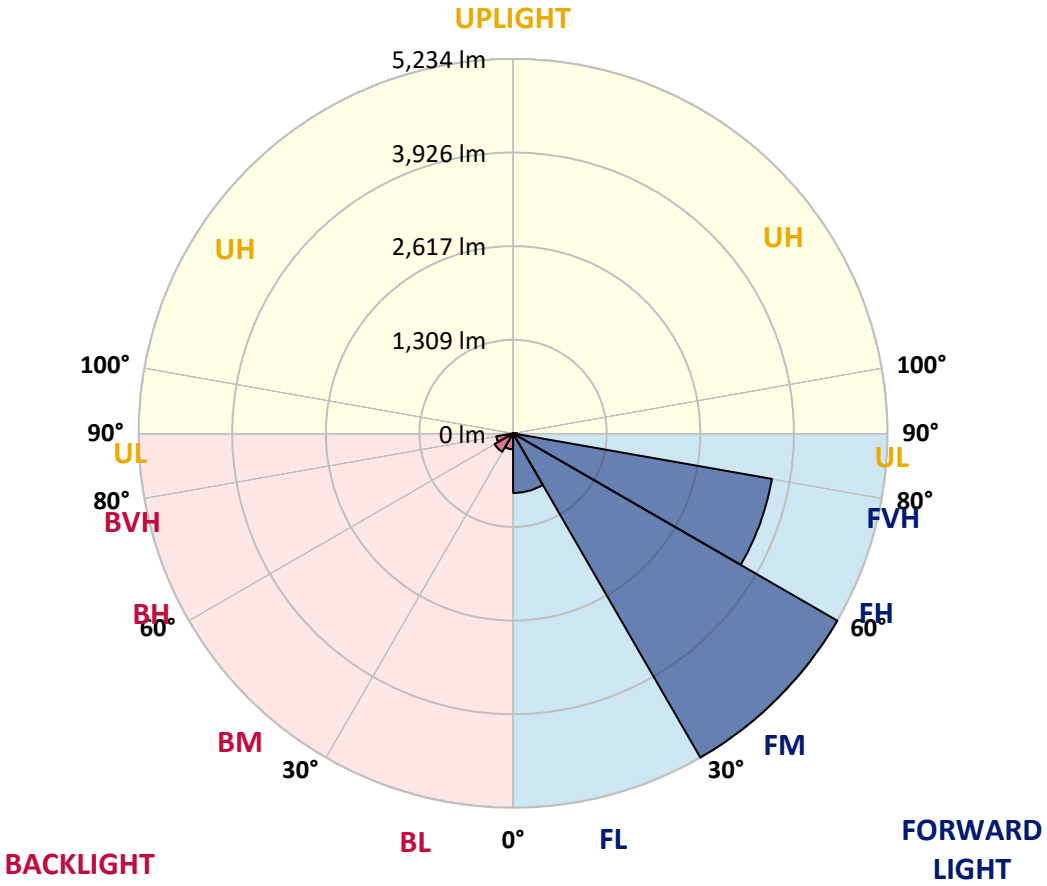
Scaled Data Report

REPORT NUMBER: P639480
CATALOG NUMBER: GWS-SA5B-830-U-T2-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	832.9	7.9			
FM	(30°-60°)	5234.1	49.5			
FH	(60°-80°)	3675.2	34.8			G2/5000
FVH	(80°-90°)	60.4	0.6			G1/100
BL	(0°-30°)	223.2	2.1	B1/500		
BM	(30°-60°)	298.0	2.8	B1/1000		
BH	(60°-80°)	238.1	2.3	B1/500		G1/500
BVH	(80°-90°)	3.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type II Short



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

Scaled Data Report

REPORT NUMBER: P639480
CATALOG NUMBER: GWS-SA5B-830-U-T2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6
2.5°	1431.8	1440.9	1431.8	1433.8	1407.5	1395.4	1369.1	1332.7	1323.6	1300.3	1264.9
5°	1606.7	1614.8	1605.7	1603.7	1573.3	1551.1	1507.6	1444.9	1426.7	1381.2	1311.5
7.5°	1701.8	1706.8	1709.9	1714.9	1703.8	1685.6	1646.1	1568.3	1549.1	1475.3	1377.2
10°	1711.9	1715.9	1731.1	1761.4	1783.7	1794.8	1772.5	1700.8	1670.4	1598.6	1458.1
12.5°	1683.6	1689.6	1713.9	1764.5	1826.1	1882.8	1896.9	1834.2	1806.9	1714.9	1553.1
15°	1646.1	1651.2	1684.6	1753.3	1846.4	1950.5	2009.2	1981.8	1951.5	1855.5	1658.3
17.5°	1588.5	1595.6	1642.1	1735.1	1855.5	2004.1	2130.5	2139.6	2118.4	2014.2	1774.6
20°	1556.2	1561.2	1602.7	1698.7	1849.4	2043.5	2243.7	2329.7	2306.4	2197.2	1908.0
22.5°	1583.5	1587.5	1614.8	1689.6	1829.2	2065.8	2348.9	2519.8	2506.6	2393.4	2048.6
25°	1727.0	1740.2	1724.0	1737.2	1838.3	2077.9	2433.8	2709.9	2712.9	2598.6	2194.2
27.5°	2018.3	2001.1	1962.6	1896.9	1909.0	2110.3	2506.6	2888.8	2915.1	2798.9	2323.6
30°	2314.5	2304.4	2281.1	2179.0	2094.1	2182.1	2568.3	3071.9	3113.3	2996.0	2438.9
32.5°	2647.2	2657.3	2615.8	2493.5	2348.9	2327.7	2632.0	3245.8	3323.6	3219.5	2574.4
35°	3044.6	3047.6	2965.7	2830.2	2666.4	2568.3	2746.3	3437.9	3581.5	3504.6	2755.4
37.5°	3431.8	3450.0	3405.5	3192.2	3046.6	2867.6	2935.4	3684.6	3886.9	3856.5	2982.9
40°	3774.6	3802.9	3788.8	3582.5	3391.4	3240.7	3228.6	3973.8	4255.9	4290.3	3283.2
42.5°	4047.6	4065.8	4076.9	3930.3	3761.5	3676.5	3590.6	4309.5	4691.7	4832.3	3651.3
45°	4335.8	4341.9	4365.1	4266.0	4118.4	4125.5	4018.3	4717.0	5150.8	5432.9	4073.9
47.5°	4702.8	4723.1	4711.9	4607.8	4474.3	4554.2	4460.2	5136.6	5603.8	6074.0	4506.7
50°	5149.8	5171.0	5160.9	5039.6	4890.9	4924.3	4865.6	5544.1	6040.6	6678.6	4866.7
52.5°	5380.3	5397.5	5522.9	5577.5	5499.6	5287.3	5211.5	5992.1	6409.7	7176.1	5197.3
55°	5269.1	5281.2	5554.2	5784.8	6069.9	5857.6	5559.3	6337.9	6735.3	7564.4	5443.0
57.5°	4808.0	4873.7	5244.8	5635.1	6234.7	6420.8	6123.5	6714.0	7048.7	7834.4	5684.7
60°	3862.6	3859.6	4391.4	5092.1	5913.2	6575.5	6920.3	7222.6	7363.2	8041.7	6008.2
62.5°	2134.5	2153.7	2861.5	3784.7	5019.3	6175.1	7517.9	8101.3	8080.1	8403.6	6514.8
65°	1062.7	1101.1	1485.4	2167.9	3339.8	5103.3	7621.0	9442.1	9381.4	9256.0	7561.4
67.5°	674.4	689.6	901.9	1259.9	1856.5	3280.2	6978.9	10442.1	10582.7	10267.2	8599.8
70°	436.8	462.1	626.9	861.5	1120.4	1690.6	5112.4	9794.0	10116.5	10156.0	7952.7
72.5°	237.6	255.8	400.4	614.8	808.9	845.3	2871.7	7350.0	7868.8	8615.0	6221.6
75°	135.5	148.6	219.4	417.6	593.5	514.7	1273.0	4920.2	5250.9	6156.9	4458.2
77.5°	81.9	93.0	123.4	203.2	372.1	343.8	481.3	2995.0	3205.3	3673.5	2339.8
80°	37.4	44.5	77.9	112.2	203.2	162.8	184.0	1396.4	1441.9	1507.6	774.5
82.5°	17.2	20.2	35.4	66.7	115.3	94.0	70.8	322.6	454.0	429.7	197.2
85°	2.0	2.0	13.1	27.3	32.4	24.3	29.3	72.8	92.0	129.4	56.6
87.5°	0.0	0.0	1.0	1.0	2.0	3.0	6.1	9.1	13.1	21.2	14.2
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: P639480
CATALOG NUMBER: GWS-SA5B-830-U-T2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6
2.5°	1248.8	1220.5	1195.2	1157.8	1132.5	1104.2	1085.0	1061.7	1052.6	1045.5	1035.4
5°	1277.1	1231.6	1169.9	1101.1	1044.5	990.9	941.4	909.0	880.7	876.7	862.5
7.5°	1323.6	1255.8	1151.7	1039.5	943.4	854.4	784.7	728.0	699.7	690.6	674.4
10°	1385.3	1292.2	1124.4	952.5	814.0	707.8	628.9	565.2	520.7	504.6	492.4
12.5°	1454.0	1325.6	1080.9	845.3	687.6	566.2	466.1	398.4	370.1	360.0	350.9
15°	1532.9	1357.0	1012.2	738.1	564.2	416.6	345.8	316.5	304.4	301.3	298.3
17.5°	1608.7	1377.2	930.3	626.9	433.8	323.6	290.2	279.1	276.0	273.0	271.0
20°	1694.7	1391.3	834.2	521.8	336.7	274.0	257.8	249.8	243.7	237.6	236.6
22.5°	1782.7	1391.3	730.0	418.6	282.1	245.7	227.5	212.3	201.2	195.2	193.1
25°	1866.6	1372.1	626.9	334.7	248.7	218.4	195.2	178.0	162.8	155.7	153.7
27.5°	1926.2	1322.6	536.9	283.1	225.5	194.1	165.8	146.6	134.5	127.4	126.4
30°	1963.6	1248.8	454.0	252.8	205.3	168.9	140.5	124.4	115.3	110.2	108.2
32.5°	1992.0	1157.8	380.2	231.6	186.1	146.6	122.3	109.2	101.1	97.1	96.1
35°	2048.6	1071.8	325.6	212.3	165.8	128.4	107.2	97.1	91.0	85.9	84.9
37.5°	2127.5	1000.0	282.1	195.2	146.6	114.3	97.1	88.0	82.9	77.9	76.8
40°	2243.7	954.5	249.8	178.0	129.4	103.1	89.0	80.9	73.8	68.8	67.7
42.5°	2422.7	933.3	228.5	160.8	114.3	93.0	81.9	71.8	64.7	59.7	58.6
45°	2636.1	944.4	210.3	143.6	104.1	85.9	72.8	62.7	55.6	50.6	49.5
47.5°	2864.6	983.8	195.2	127.4	94.0	78.9	64.7	53.6	47.5	42.5	41.5
50°	3103.2	1048.6	182.0	112.2	85.9	70.8	55.6	46.5	40.4	36.4	35.4
52.5°	3310.5	1136.5	168.9	101.1	78.9	62.7	48.5	40.4	34.4	30.3	29.3
55°	3508.7	1219.4	158.8	91.0	70.8	54.6	42.5	34.4	29.3	25.3	24.3
57.5°	3724.1	1307.4	146.6	81.9	63.7	48.5	37.4	29.3	25.3	21.2	20.2
60°	4037.5	1437.9	128.4	74.8	55.6	42.5	32.4	26.3	22.2	17.2	16.2
62.5°	4489.5	1675.5	108.2	64.7	47.5	36.4	27.3	22.2	18.2	14.2	12.1
65°	5334.8	2079.9	89.0	53.6	38.4	30.3	23.3	18.2	14.2	10.1	9.1
67.5°	*5943.5*	*2185.1*	*71.8*	*43.5*	*31.3*	*23.3*	*19.2*	*14.2*	*10.1*	*7.1*	*6.1*
70°	5196.3	1569.3	55.6	35.4	26.3	18.2	15.2	11.1	7.1	5.1	4.0
72.5°	3915.2	1025.3	41.5	27.3	20.2	15.2	11.1	9.1	6.1	4.0	3.0
75°	2759.4	592.5	30.3	20.2	14.2	11.1	9.1	7.1	5.1	3.0	3.0
77.5°	1414.6	244.7	21.2	14.2	10.1	7.1	6.1	4.0	4.0	3.0	2.0
80°	429.7	80.9	12.1	9.1	7.1	5.1	3.0	3.0	3.0	2.0	1.0
82.5°	98.1	26.3	7.1	7.1	5.1	4.0	3.0	1.0	1.0	0.0	0.0
85°	25.3	8.1	6.1	5.1	5.1	4.0	2.0	1.0	0.0	0.0	0.0
87.5°	9.1	5.1	5.1	5.1	4.0	3.0	2.0	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

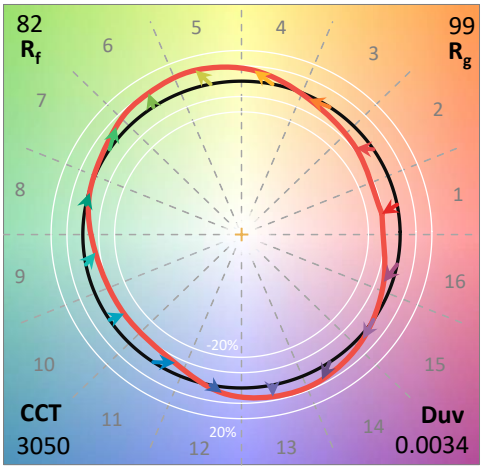
Test Information

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

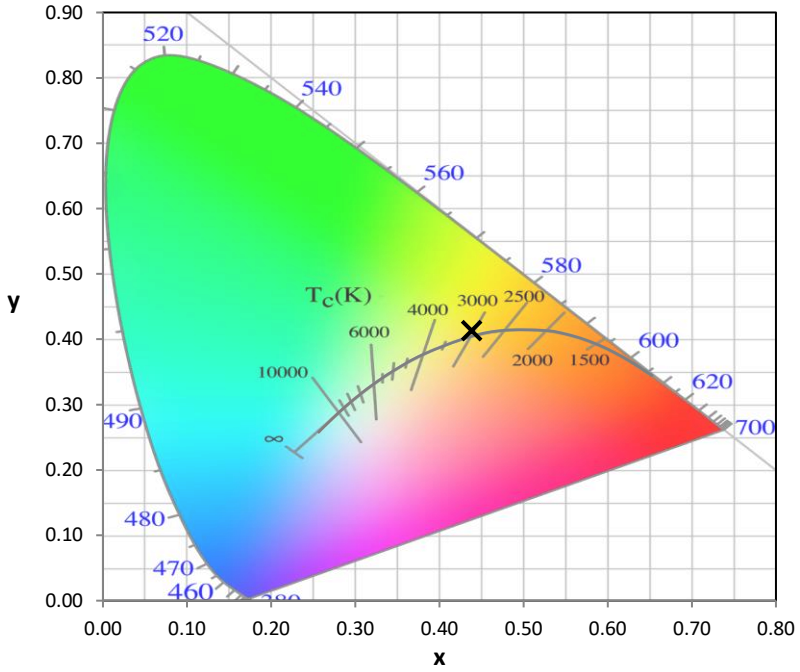
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

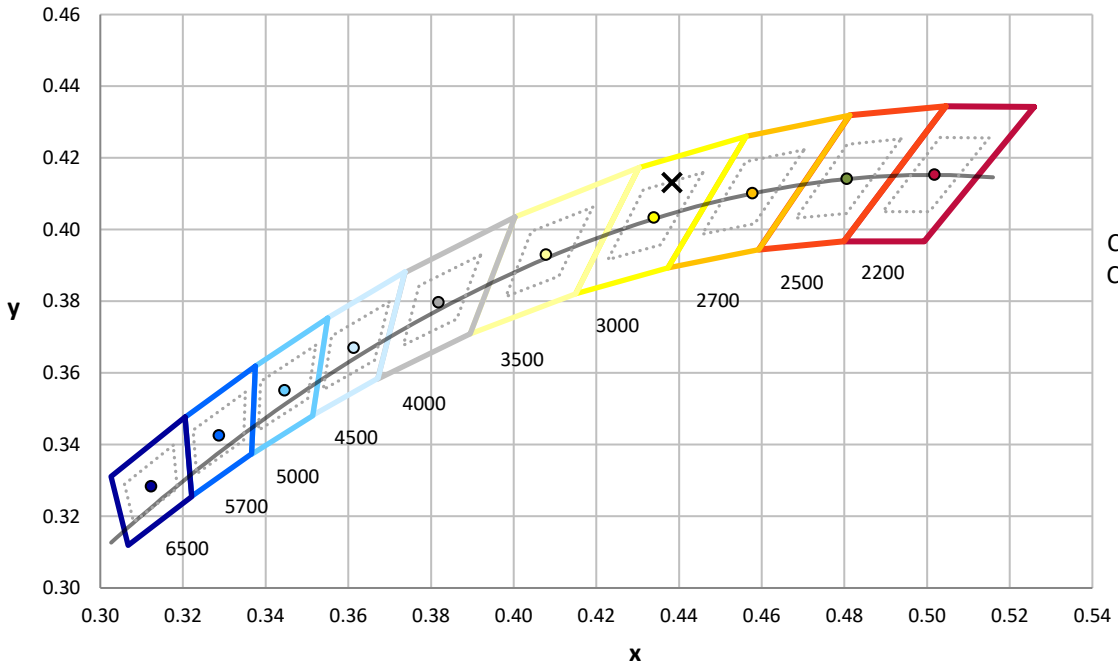
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

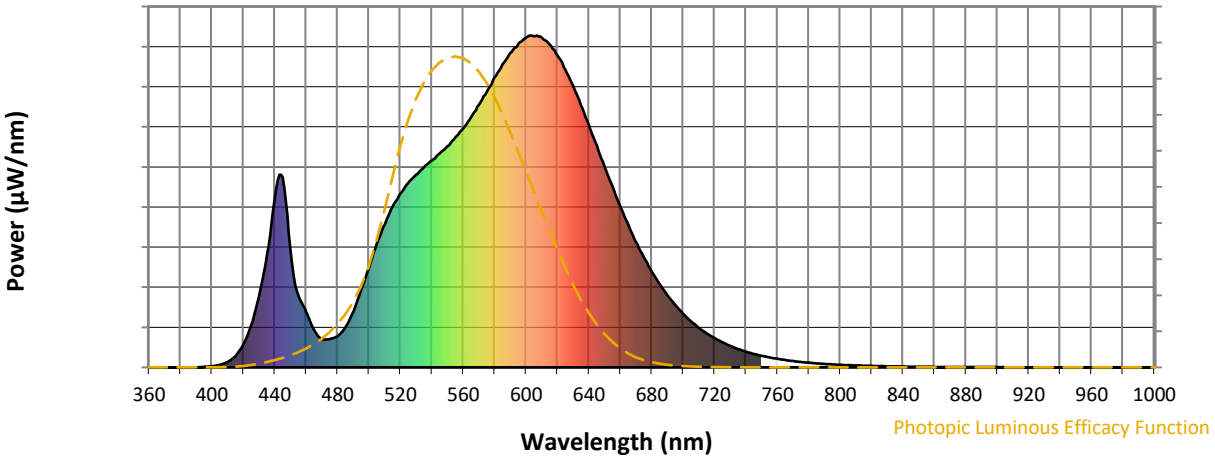


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

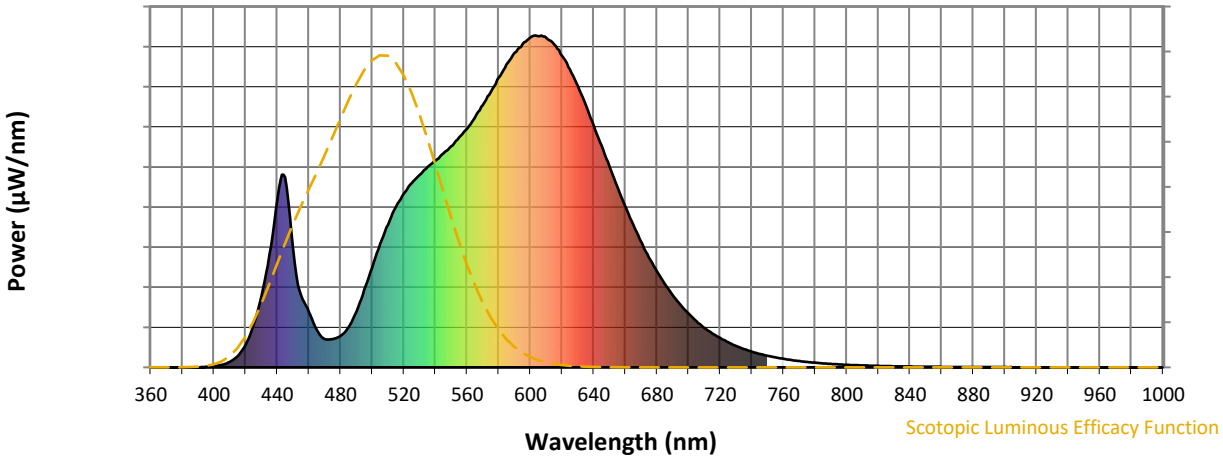


Photopic Lumens: NR

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

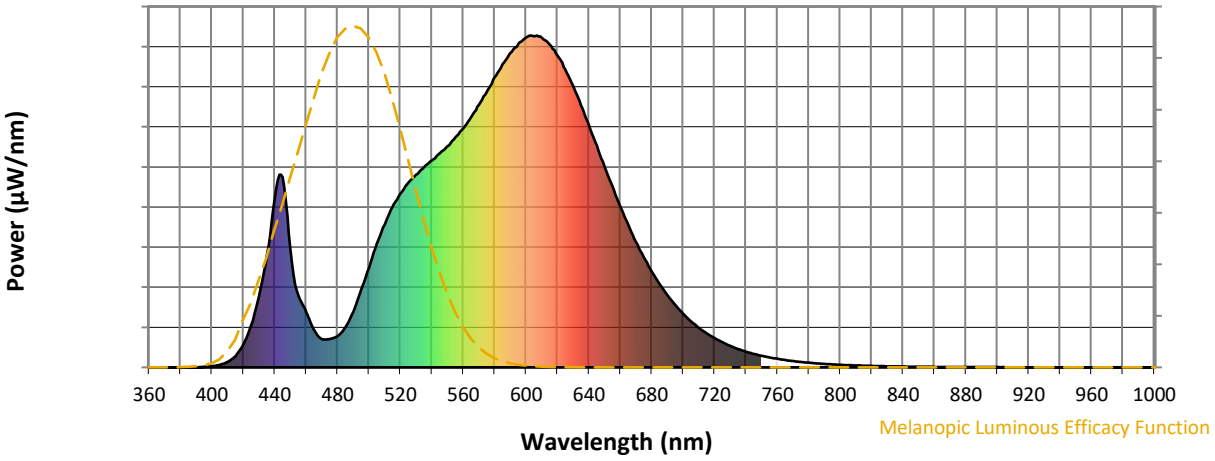


Scotopic Lumens: NR **S/P: 1.27**

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			

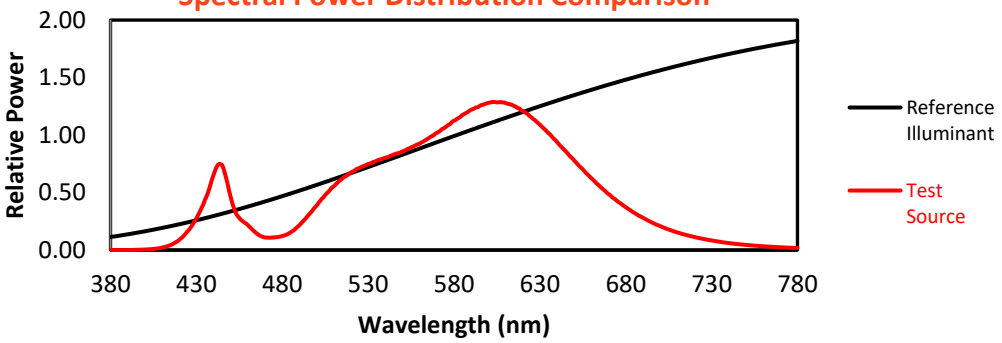
REPORT NUMBER: SP1-2408-195-9

TM-30-18

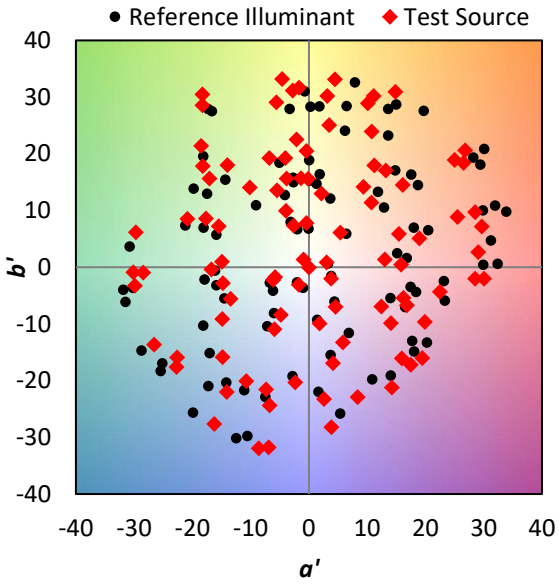
Summary

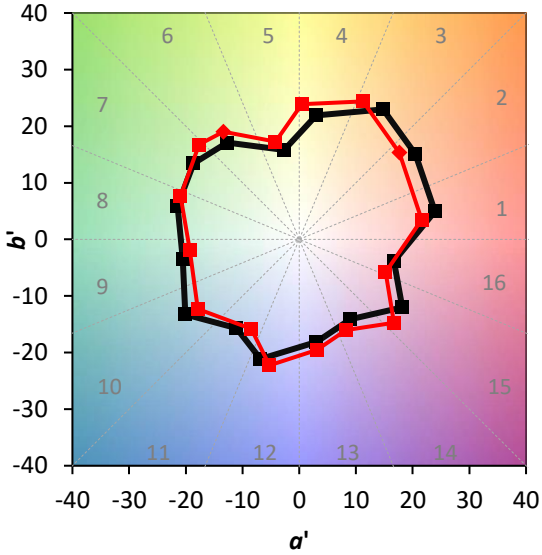
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

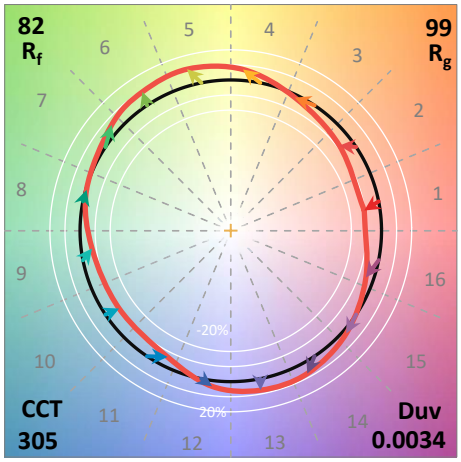
Spectral Power Distribution Comparison

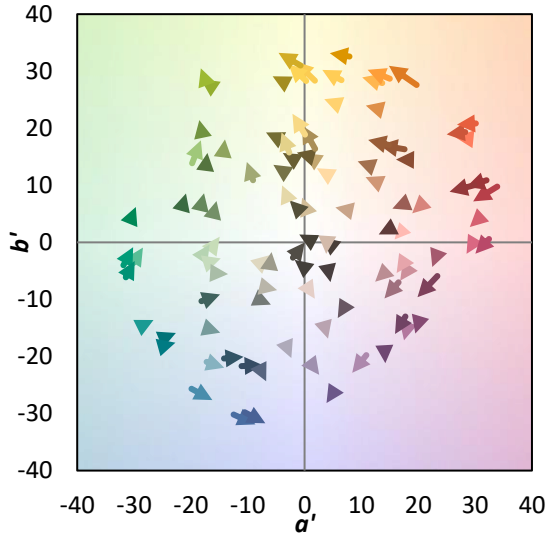


Color Vector Graphics







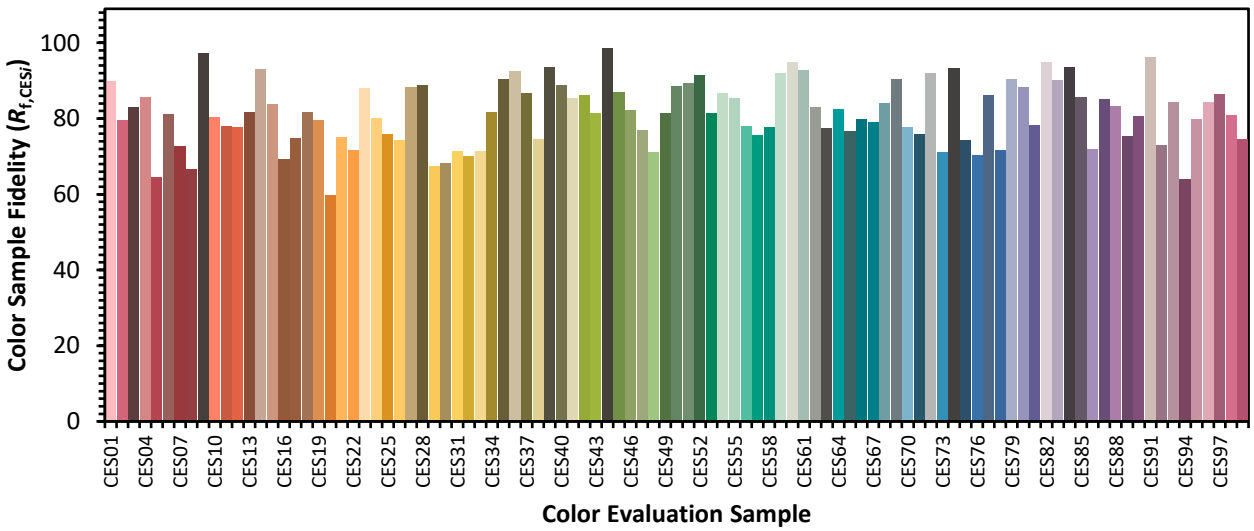


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

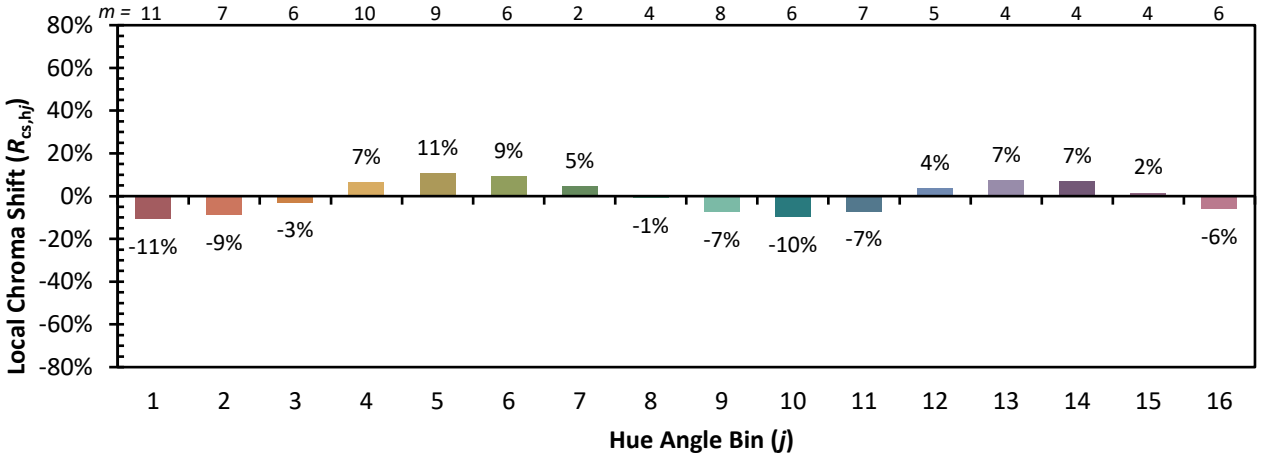
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

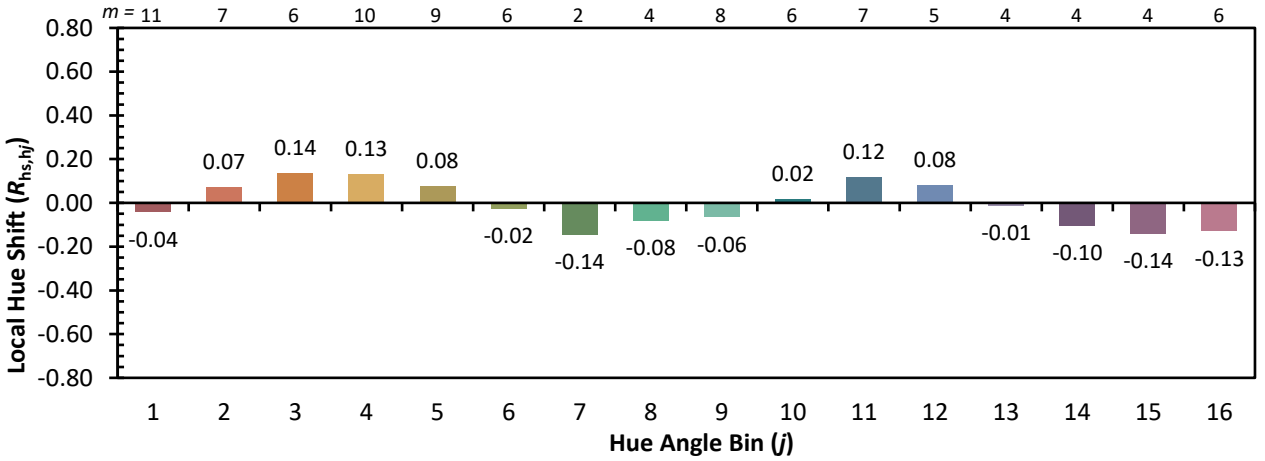


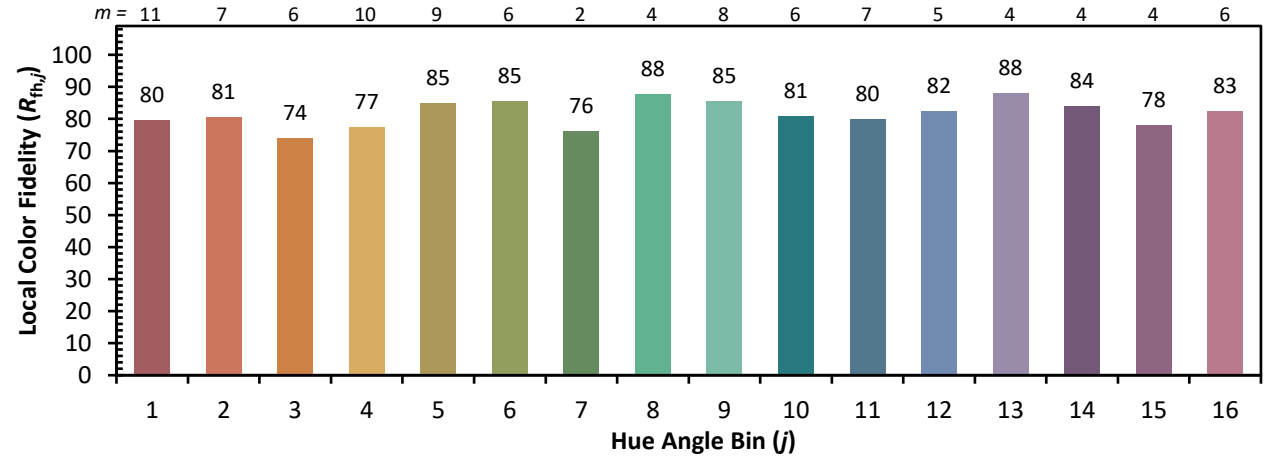
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



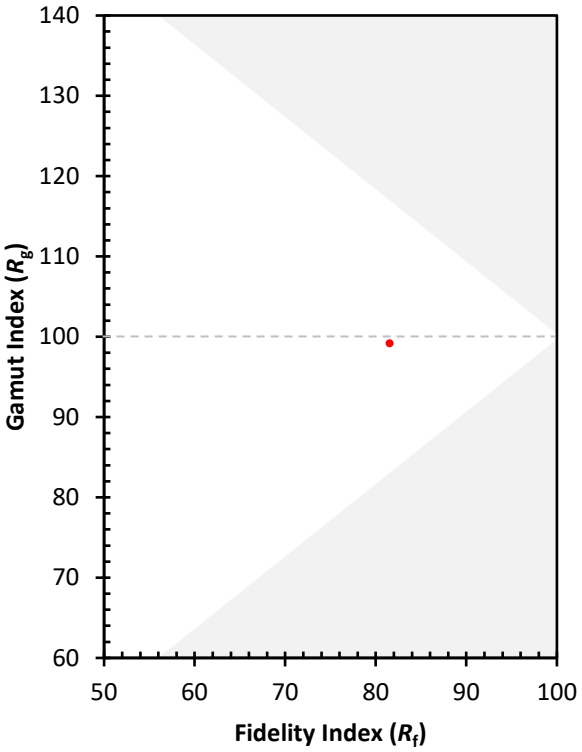


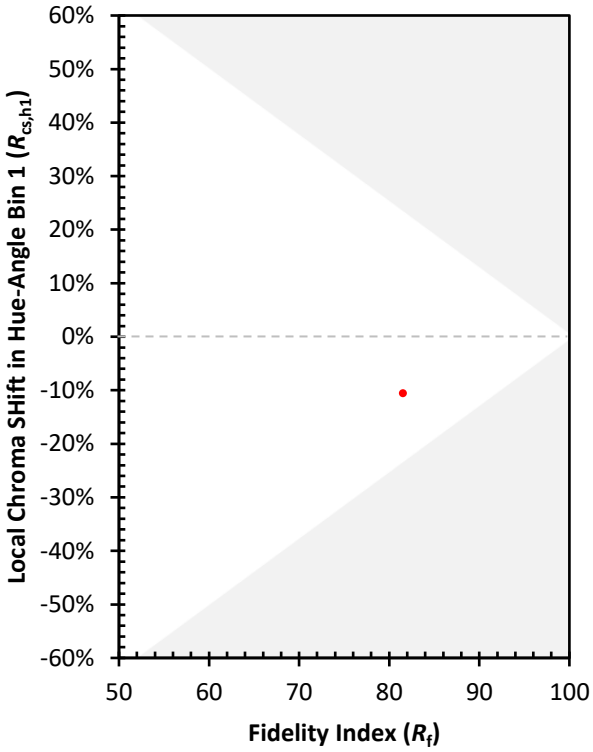


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)