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: P633538

Luminaire Tested: GWS-SA2E-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:	P633538
	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-SA2E-830-U-T2-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II 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:	6885 lumens
Efficiency:	N/A
Efficacy:	63.6 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G1

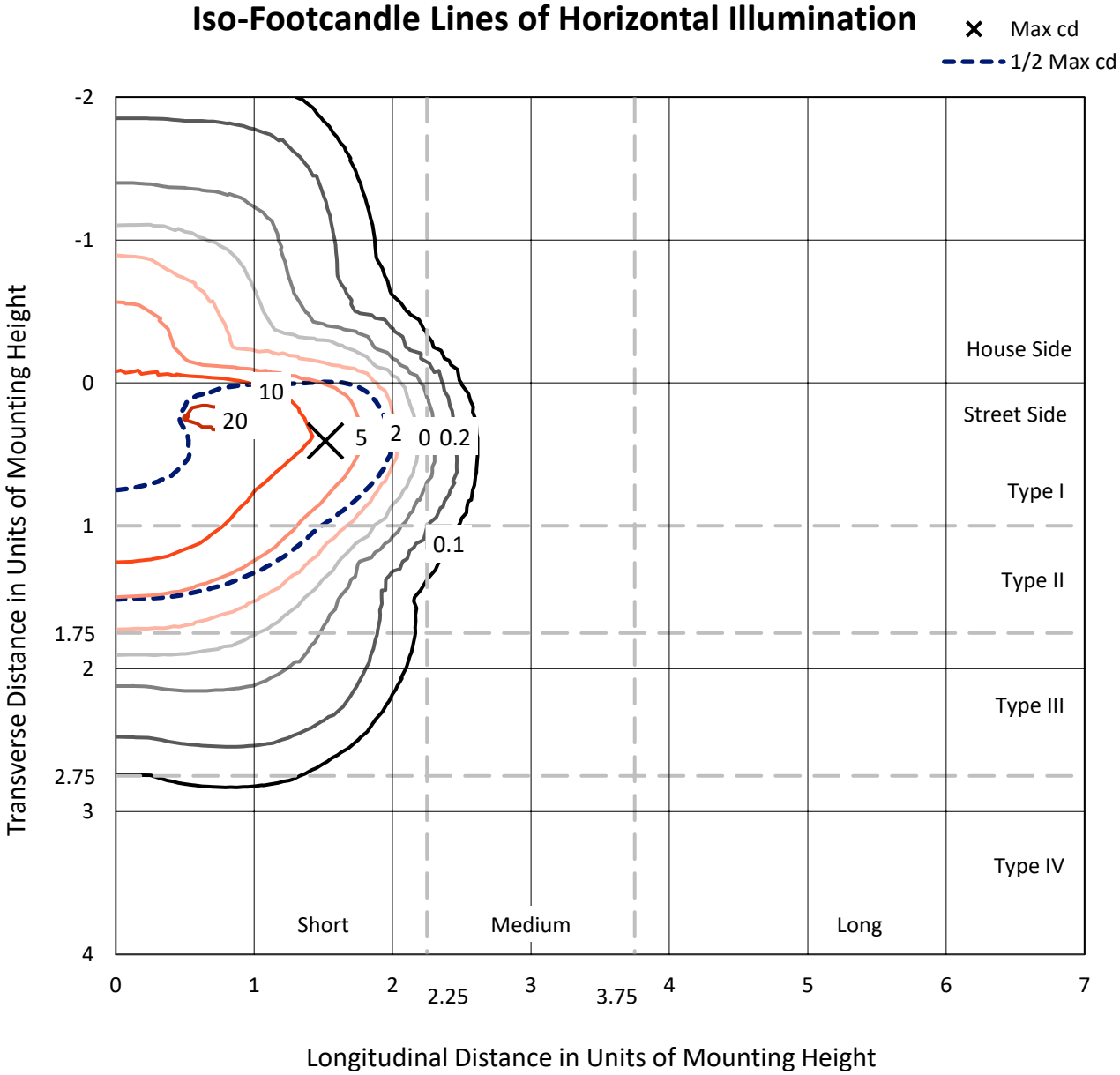
Input Watts (W):	108.2
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P633538
CATALOG NUMBER: GWS-SA2E-830-U-T2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



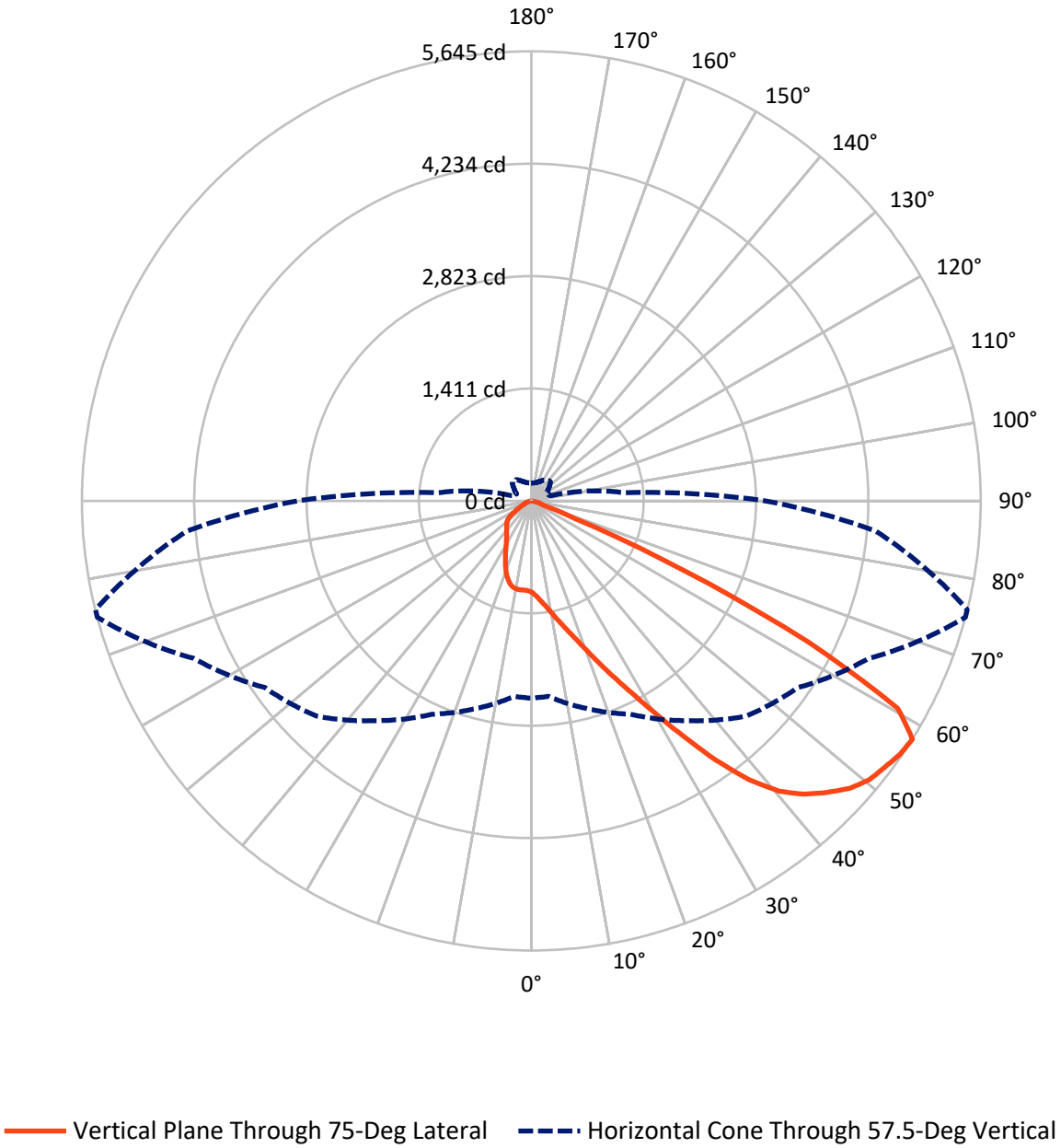
Based on 10 foot mounting height. Maximum calculated value = 21.5 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P633538
CATALOG NUMBER: GWS-SA2E-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

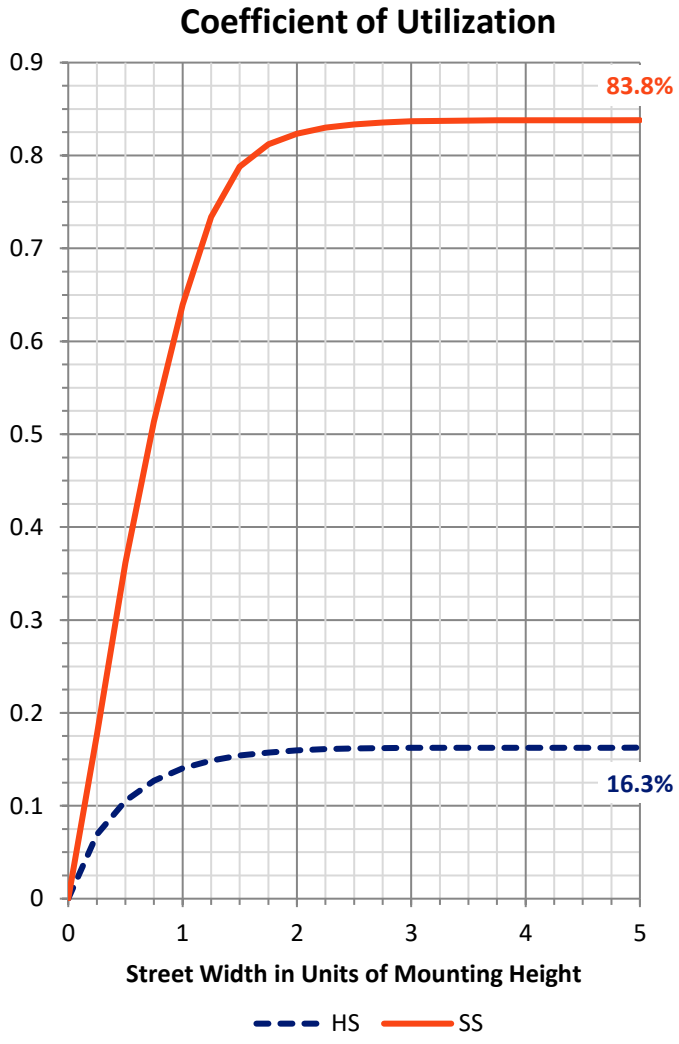
REPORT NUMBER: P633538
CATALOG NUMBER: GWS-SA2E-830-U-T2-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1124.7	0.0	1124.7
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	5760.3	0.0	5760.3
	% Fixture	83.7	0.0	83.7
Total	Lumens	6885.0	0.0	6885.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.7
10°-20°	379.6	5.5
20°-30°	695.1	10.1
30°-40°	1153.2	16.8
40°-50°	1761.3	25.6
50°-60°	1979.1	28.7
60°-70°	730.0	10.6
70°-80°	69.8	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°	6885.0	100.0
0°-180°	6885.0	100.0



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

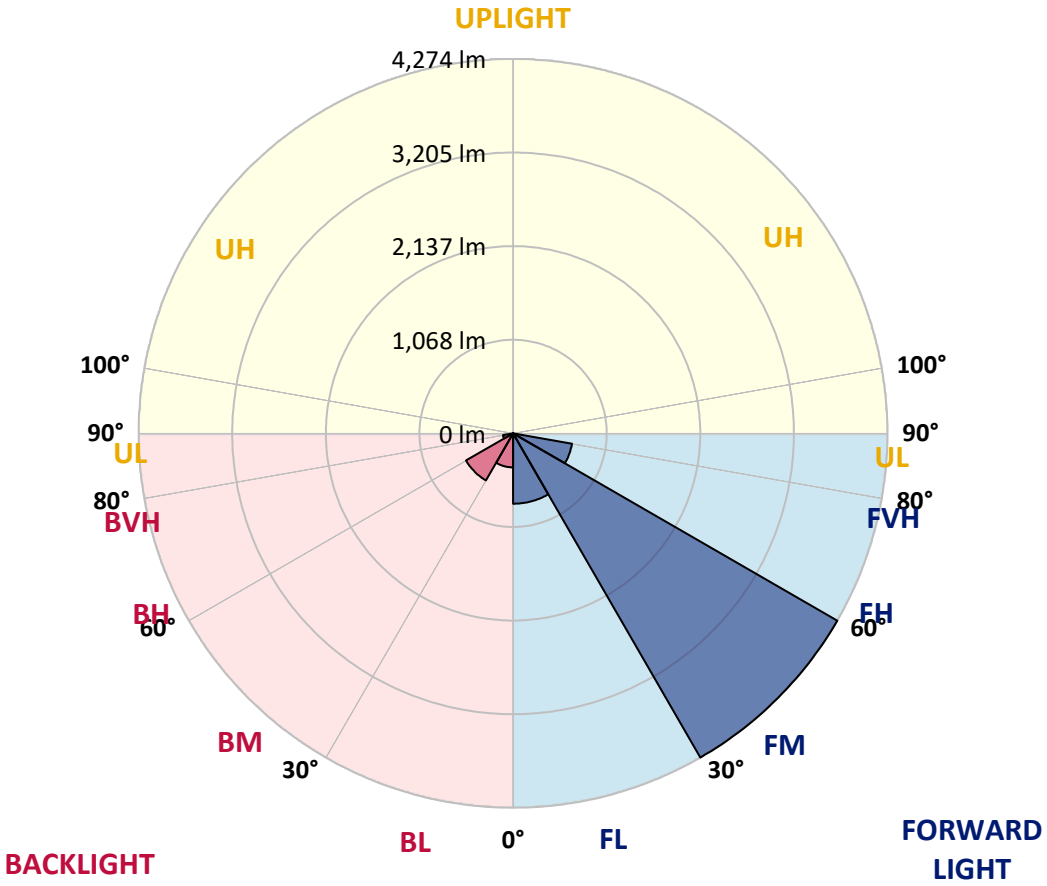
Scaled Data Report

REPORT NUMBER: P633538
CATALOG NUMBER: GWS-SA2E-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°)	803.5	11.7			
FM	(30°-60°)	4273.9	62.1			
FH	(60°-80°)	683.0	9.9			G1/1800
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	388.1	5.6	B1/500		
BM	(30°-60°)	619.8	9.0	B1/1000		
BH	(60°-80°)	116.8	1.7	B1/500		G1/500
BVH	(80°-90°)	0.0	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-G1
Type II Short



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

Scaled Data Report

REPORT NUMBER: P633538
CATALOG NUMBER: GWS-SA2E-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1148.3	1148.3	1148.3	1148.3	1148.3	1148.3	1148.3	1148.3	*1148.3*	1148.3	1148.3
2.5°	1282.9	1296.2	1292.1	1283.8	1278.8	1261.3	1250.5	1218.9	*1196.5*	1194.0	1173.2
5°	1445.0	1442.5	1439.1	1429.2	1420.9	1393.4	1361.0	1307.9	*1260.5*	1254.7	1210.6
7.5°	1533.9	1535.5	1537.2	1535.5	1529.7	1508.9	1473.2	1410.9	*1338.6*	1333.6	1263.8
10°	1570.4	1573.7	1582.1	1597.8	1612.0	1610.3	1589.5	1525.6	*1436.6*	1428.3	1334.4
12.5°	1587.9	1592.0	1605.3	1635.2	1673.5	1703.4	1706.7	1649.4	*1551.3*	1538.0	1418.4
15°	1612.0	1616.1	1632.7	1671.8	1727.5	1786.5	1824.7	1788.1	*1678.4*	1664.3	1510.6
17.5°	1622.8	1628.6	1652.7	1704.2	1776.5	1867.1	1953.5	1950.2	*1828.8*	1818.0	1617.8
20°	1643.5	1647.7	1669.3	1725.0	1812.2	1942.7	2088.1	2140.4	*2012.5*	1996.7	1747.4
22.5°	1709.2	1710.9	1720.8	1755.7	1837.1	1997.5	2225.2	2362.3	*2229.3*	2208.6	1892.8
25°	1816.4	1815.5	1819.7	1825.5	1885.3	2053.2	2357.3	2612.4	*2477.8*	2455.3	2057.3
27.5°	1952.6	1952.6	1962.6	1946.0	1970.1	2122.2	2487.8	2899.9	*2766.9*	2735.4	2237.6
30°	2113.0	2112.2	2135.4	2108.9	2116.3	2231.0	2628.2	3213.1	*3115.9*	3076.9	2445.4
32.5°	2330.7	2325.7	2352.3	2315.8	2290.8	2395.5	2799.3	3540.5	*3533.9*	3474.0	2706.3
35°	2605.7	2597.4	2605.7	2570.0	2525.1	2625.7	3023.7	3867.1	*3997.5*	3934.4	3017.0
37.5°	2879.1	2905.7	2914.8	2853.4	2816.8	2917.3	3293.7	4159.6	*4440.4*	4374.8	3340.3
40°	3201.5	3193.2	3224.8	3155.8	3132.5	3243.9	3558.0	4377.3	*4791.0*	4728.7	3627.8
42.5°	3439.2	3454.1	3493.2	3454.9	3436.7	3541.4	3779.8	4504.4	*5034.5*	4973.0	3833.0
45°	3724.2	3735.0	3749.9	3718.3	3699.2	3802.3	3940.2	4560.1	*5219.8*	5153.3	3970.9
47.5°	4032.4	4040.7	4040.7	3975.9	3914.4	3956.8	4047.4	4591.6	*5390.1*	5326.2	4073.1
50°	4253.4	4257.6	4294.2	4248.5	4114.7	4049.0	4096.4	4622.4	*5503.1*	5443.3	4106.4
52.5°	4057.3	4052.4	4172.8	4267.6	4303.3	4172.8	4181.2	4667.2	*5558.0*	5506.5	4133.0
55°	3416.7	3408.4	3577.9	3808.1	4123.0	4290.0	4283.4	4693.8	*5618.6*	5587.1	4229.3
57.5°	*2477.0*	*2462.8*	*2698.8*	*2954.7*	*3367.7*	*3820.5*	*4086.4*	*4678.9*	*5645.2*	*5642.7*	*4341.5*
60°	1489.0	1477.4	1700.0	1969.3	2288.3	2743.7	3184.9	4191.1	*5289.6*	5294.6	4049.9
62.5°	916.5	927.3	1128.4	1265.5	1384.3	1521.4	1776.5	2819.3	*3918.6*	3951.0	2845.9
65°	616.5	624.8	811.0	983.8	983.8	804.3	690.5	1347.7	*2090.6*	2035.7	1346.1
67.5°	413.8	422.9	570.0	771.9	801.0	560.9	280.0	402.2	*582.5*	565.0	333.2
70°	243.5	253.4	379.7	529.3	583.3	390.5	187.0	170.3	*165.4*	160.4	129.6
72.5°	108.8	113.0	193.6	269.2	246.0	164.5	132.1	136.3	*128.8*	126.3	105.5
75°	33.2	34.9	49.9	58.2	59.0	59.0	79.8	107.2	*101.4*	102.2	81.4
77.5°	8.3	8.3	13.3	12.5	6.6	5.8	15.0	24.1	*24.9*	22.4	16.6
80°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	*0.8*	0.8	0.8
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: P633538
CATALOG NUMBER: GWS-SA2E-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1148.3	1148.3	1148.3	1148.3	1148.3	1148.3	1148.3	1148.3	1148.3	1148.3	1148.3
2.5°	1164.1	1142.5	1128.4	1108.4	1094.3	1079.4	1066.1	1055.3	1049.4	1047.8	1048.6
5°	1190.7	1156.6	1123.4	1085.2	1058.6	1033.7	1013.7	997.9	990.4	988.0	988.0
7.5°	1231.4	1184.1	1125.1	1065.2	1020.4	981.3	958.0	940.6	933.9	932.3	927.3
10°	1284.6	1219.8	1122.6	1029.5	966.4	925.6	909.0	904.0	906.5	907.4	906.5
12.5°	1348.6	1257.2	1106.8	977.2	909.0	884.1	885.8	899.0	914.0	921.5	923.1
15°	1416.7	1291.2	1071.0	914.8	860.0	859.2	883.3	914.0	943.1	955.6	958.9
17.5°	1493.2	1318.7	1016.2	848.4	817.6	841.7	884.9	932.3	971.3	992.1	996.3
20°	1577.1	1341.1	946.4	786.0	780.2	823.4	883.3	941.4	989.6	1012.9	1017.0
22.5°	1664.3	1356.9	865.8	728.7	746.2	802.7	867.5	924.0	969.7	996.3	999.6
25°	1764.0	1358.5	783.6	680.5	714.6	774.4	829.3	875.8	914.0	937.3	939.8
27.5°	1851.3	1338.6	710.4	641.5	685.5	739.5	776.1	801.8	828.4	841.7	842.5
30°	1951.8	1303.7	641.5	609.9	655.6	696.3	714.6	720.4	722.9	725.4	722.1
32.5°	2071.5	1261.3	589.9	579.1	621.5	648.9	653.9	642.3	628.2	608.2	603.2
35°	2218.5	1223.1	547.6	549.2	584.1	600.8	596.6	571.7	544.2	520.2	516.0
37.5°	2378.1	1190.7	515.2	520.2	543.4	555.1	542.6	515.2	502.7	481.9	482.8
40°	2519.3	1164.1	486.1	491.1	501.9	512.7	492.7	474.5	497.7	496.1	497.7
42.5°	2619.9	1141.7	461.2	458.7	466.1	473.6	458.7	449.5	488.6	477.8	483.6
45°	2678.9	1120.9	440.4	425.4	437.1	450.4	440.4	428.8	442.0	392.2	388.0
47.5°	2718.7	1109.3	422.1	393.0	413.8	437.1	416.3	388.0	368.9	325.7	322.4
50°	2722.9	1103.5	400.5	359.8	386.4	411.3	387.2	348.2	320.7	301.6	299.1
52.5°	2744.5	1115.1	370.6	317.4	346.5	386.4	369.8	330.7	293.3	276.7	273.4
55°	2840.9	1164.1	320.7	259.2	301.6	367.3	355.6	295.0	259.2	249.3	246.8
57.5°	*2940.6*	*1174.1*	*252.6*	*205.2*	*262.6*	*339.8*	*324.9*	*271.7*	*236.8*	*225.2*	*222.7*
60°	2688.8	967.2	189.4	169.5	231.8	314.1	300.8	257.6	216.9	202.7	200.3
62.5°	1766.5	522.6	150.4	143.7	195.3	265.9	274.2	232.7	193.6	178.6	177.8
65°	814.3	242.6	115.5	113.8	152.9	211.9	236.0	203.6	163.7	150.4	150.4
67.5°	221.9	120.5	90.6	83.9	103.9	142.1	172.0	152.1	116.3	100.5	99.7
70°	110.5	97.2	81.4	72.3	74.8	88.1	101.4	84.8	59.0	48.2	47.4
72.5°	90.6	79.8	69.0	61.5	56.5	54.0	52.3	42.4	27.4	20.8	19.9
75°	67.3	57.3	49.0	39.9	34.1	31.6	28.3	20.8	11.6	6.6	5.8
77.5°	15.0	14.1	13.3	10.0	9.1	7.5	5.8	4.2	1.7	0.0	0.0
80°	0.8	0.8	0.8	0.8	0.8	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

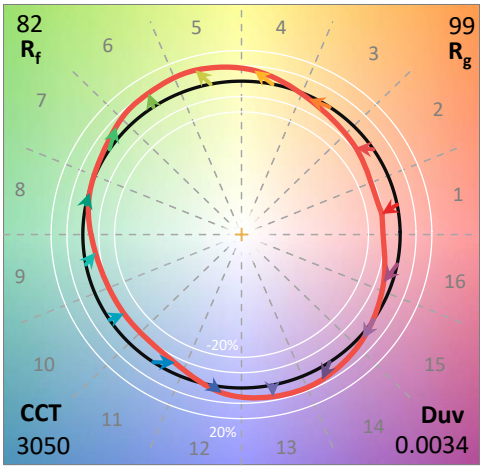
Test Information

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

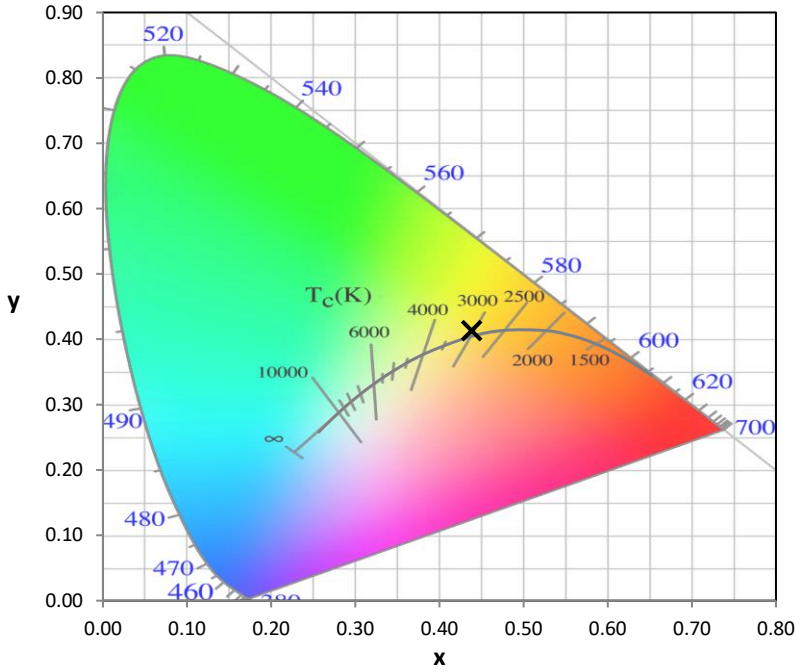
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

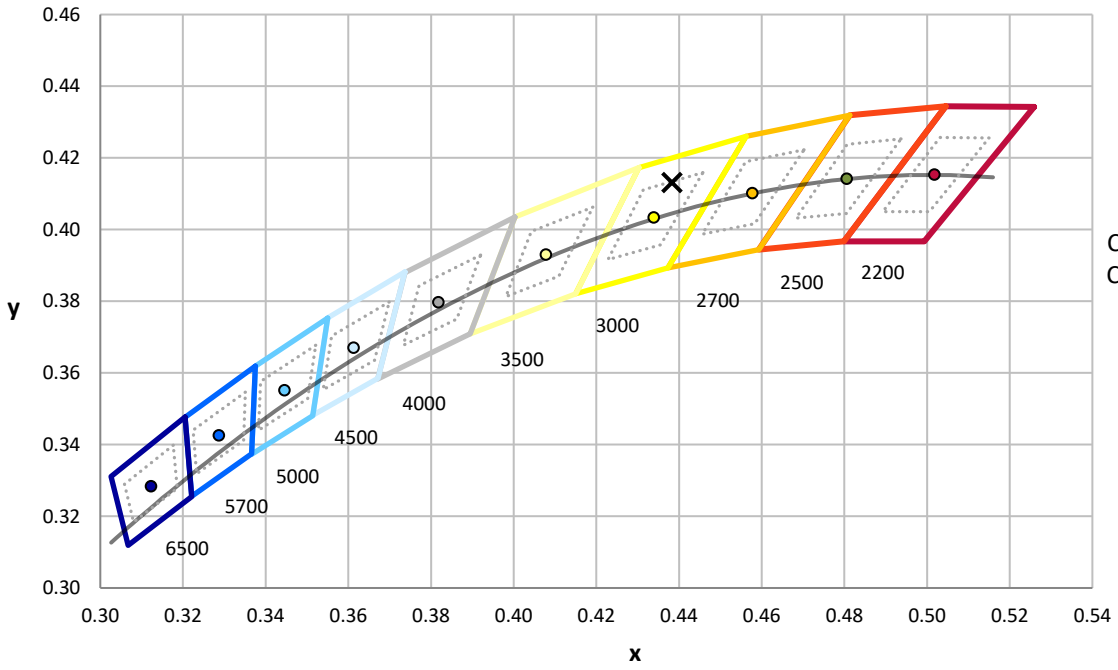
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

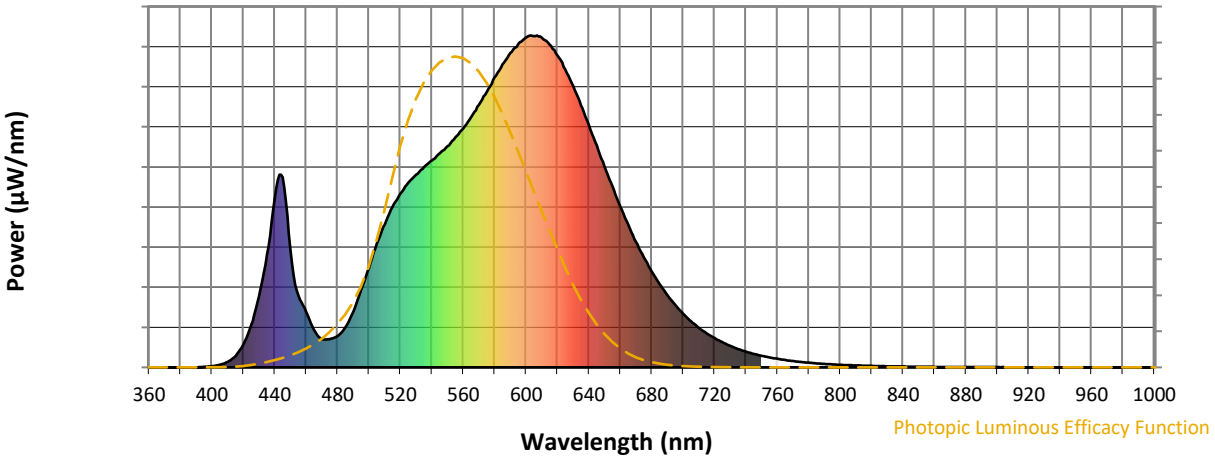


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

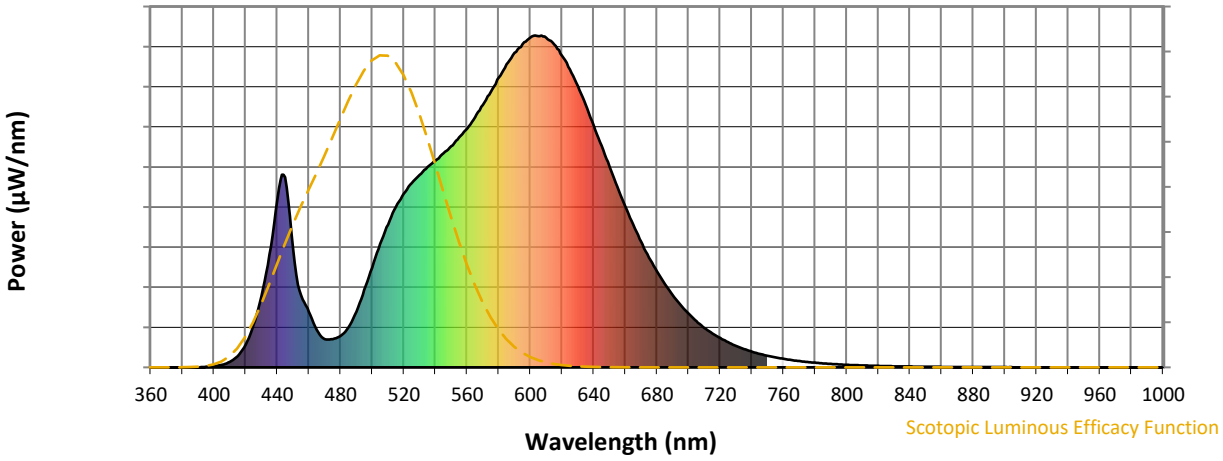


Photopic Lumens: NR

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

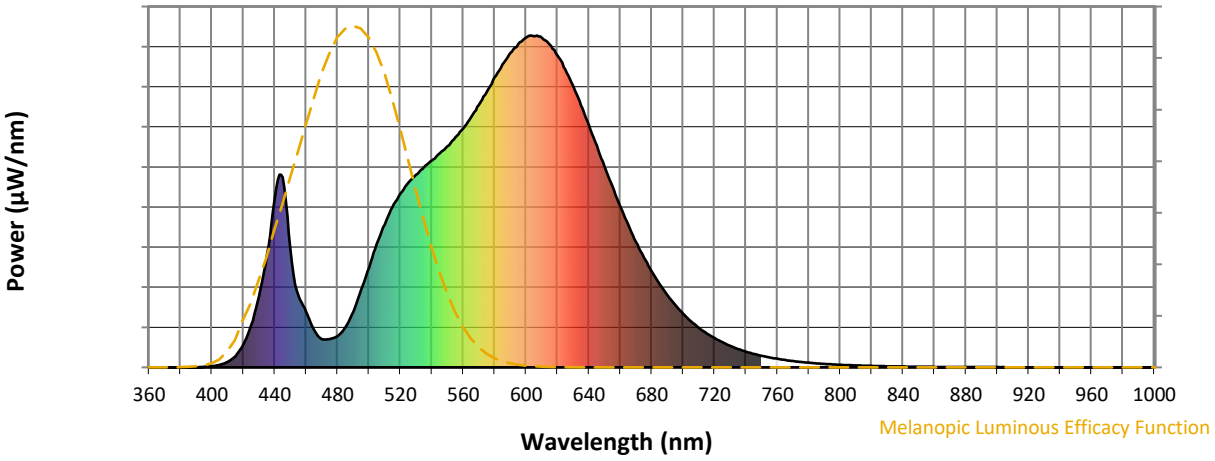


Scotopic Lumens: NR **S/P: 1.27**

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			

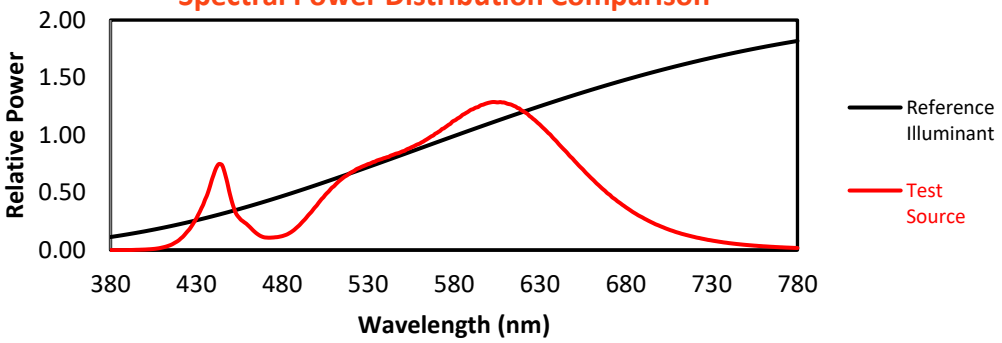
REPORT NUMBER: SP1-2408-195-9

TM-30-18

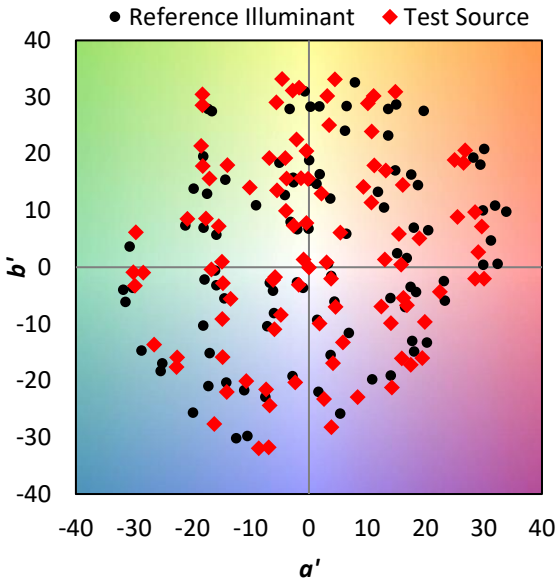
Summary

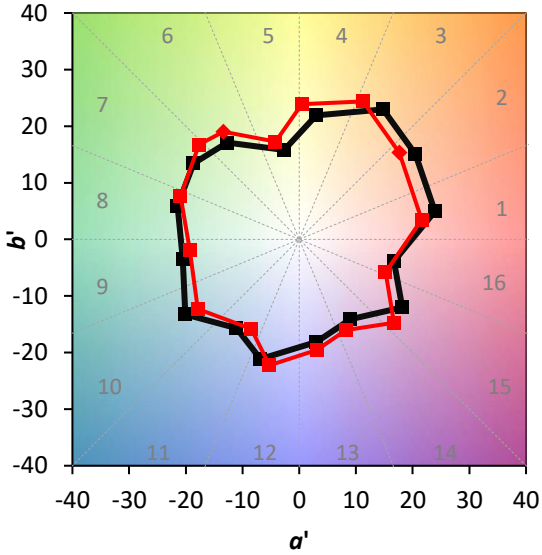
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

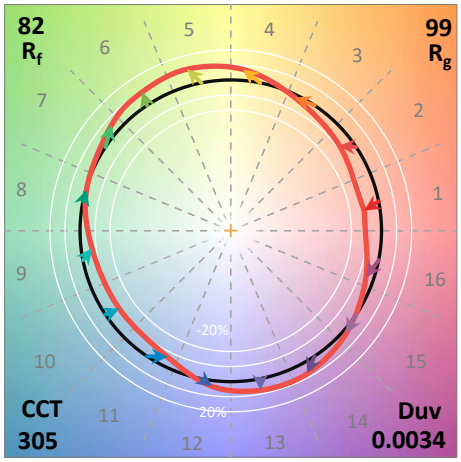
Spectral Power Distribution Comparison

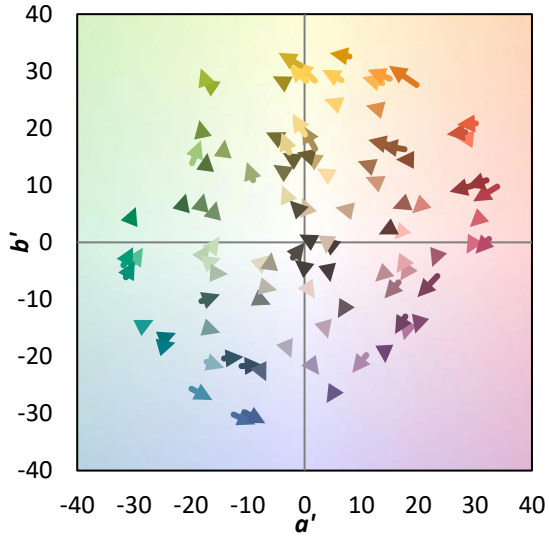


Color Vector Graphics







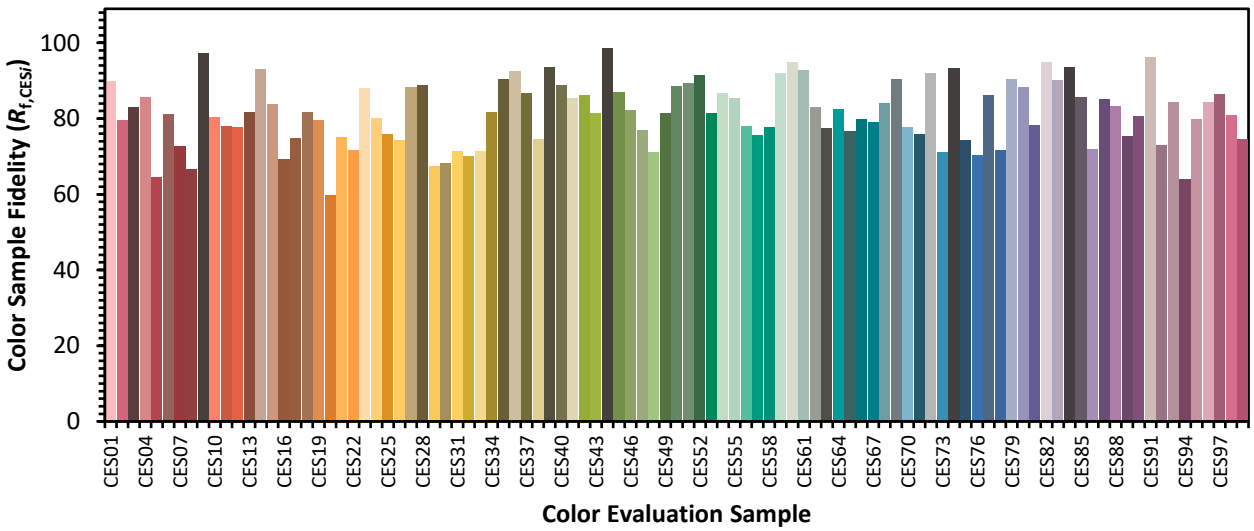


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

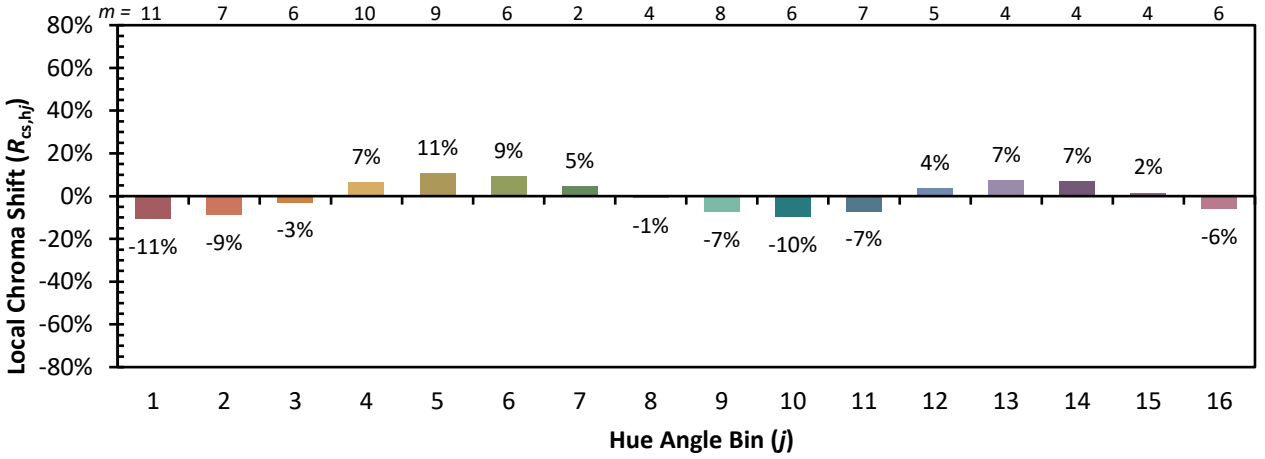
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

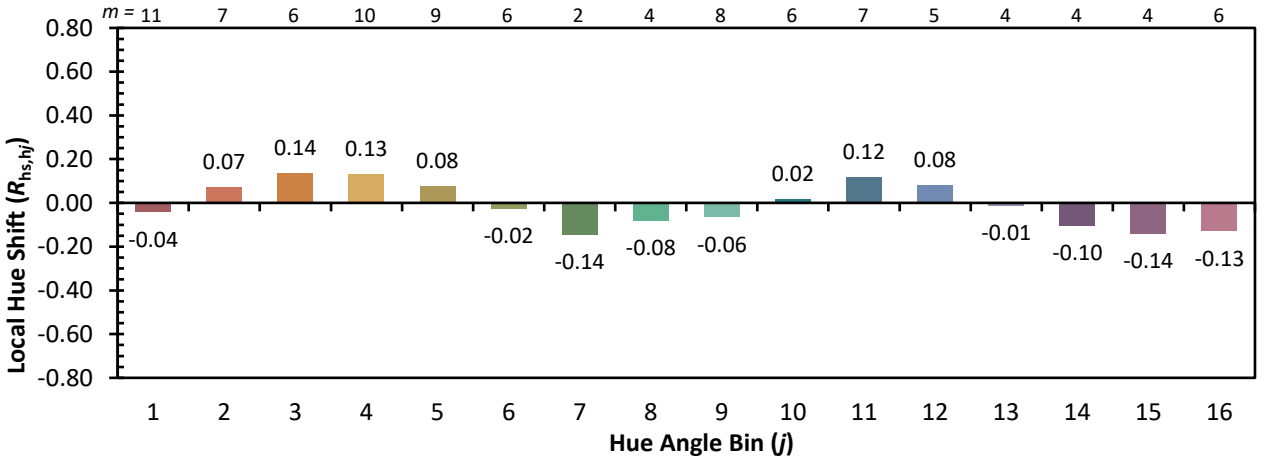


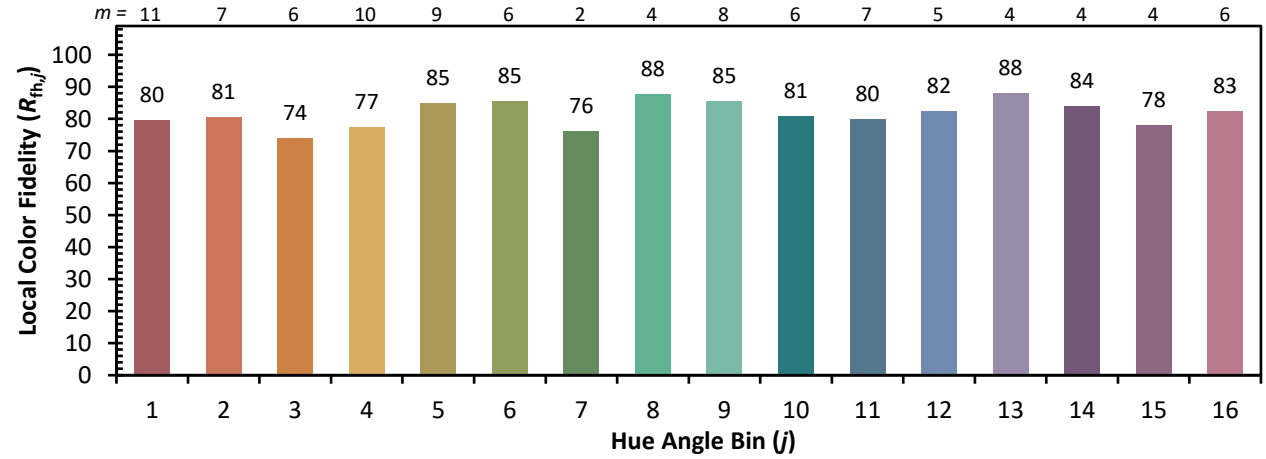
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



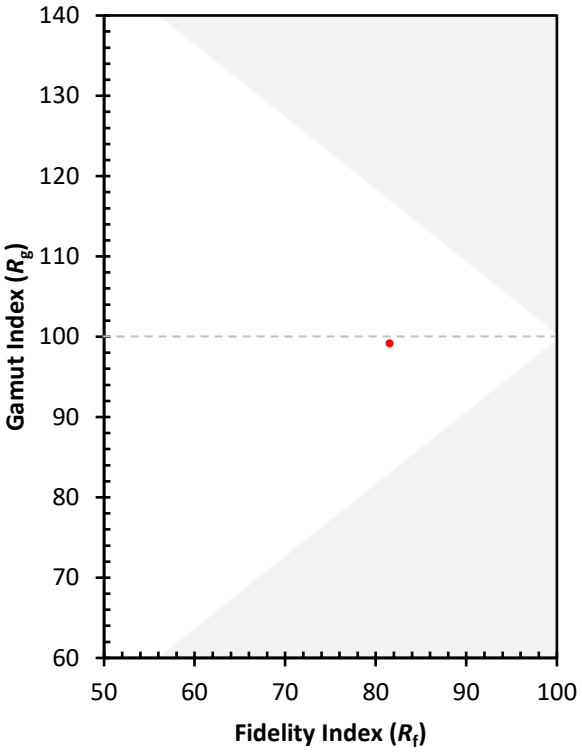


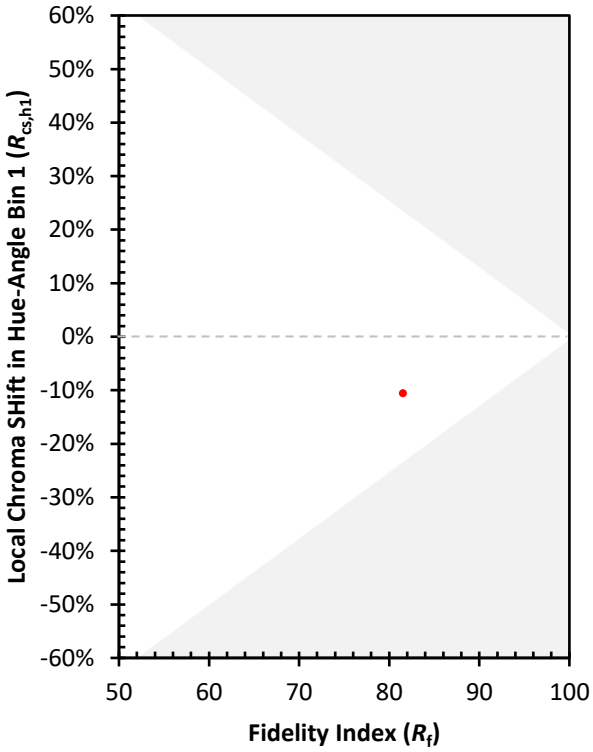


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)