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: P630058

Luminaire Tested: GWS-SA1C-830-U-SL3-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:	P630058
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-32)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1C-830-U-SL3-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2233.3 lumens
Efficiency:	N/A
Efficacy:	65.5 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G0

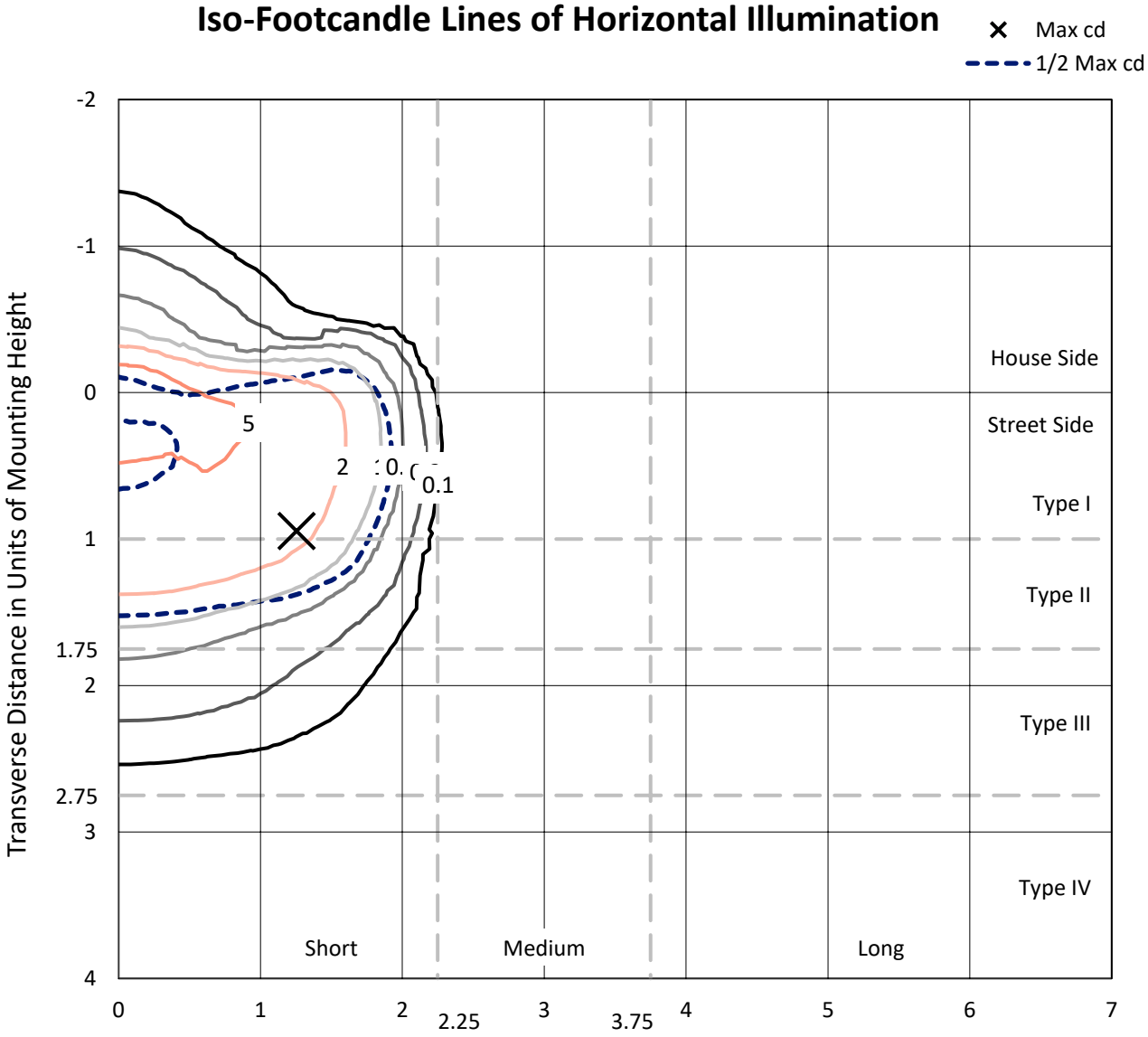
Input Watts (W):	34.1
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P630058
CATALOG NUMBER: GWS-SA1C-830-U-SL3-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



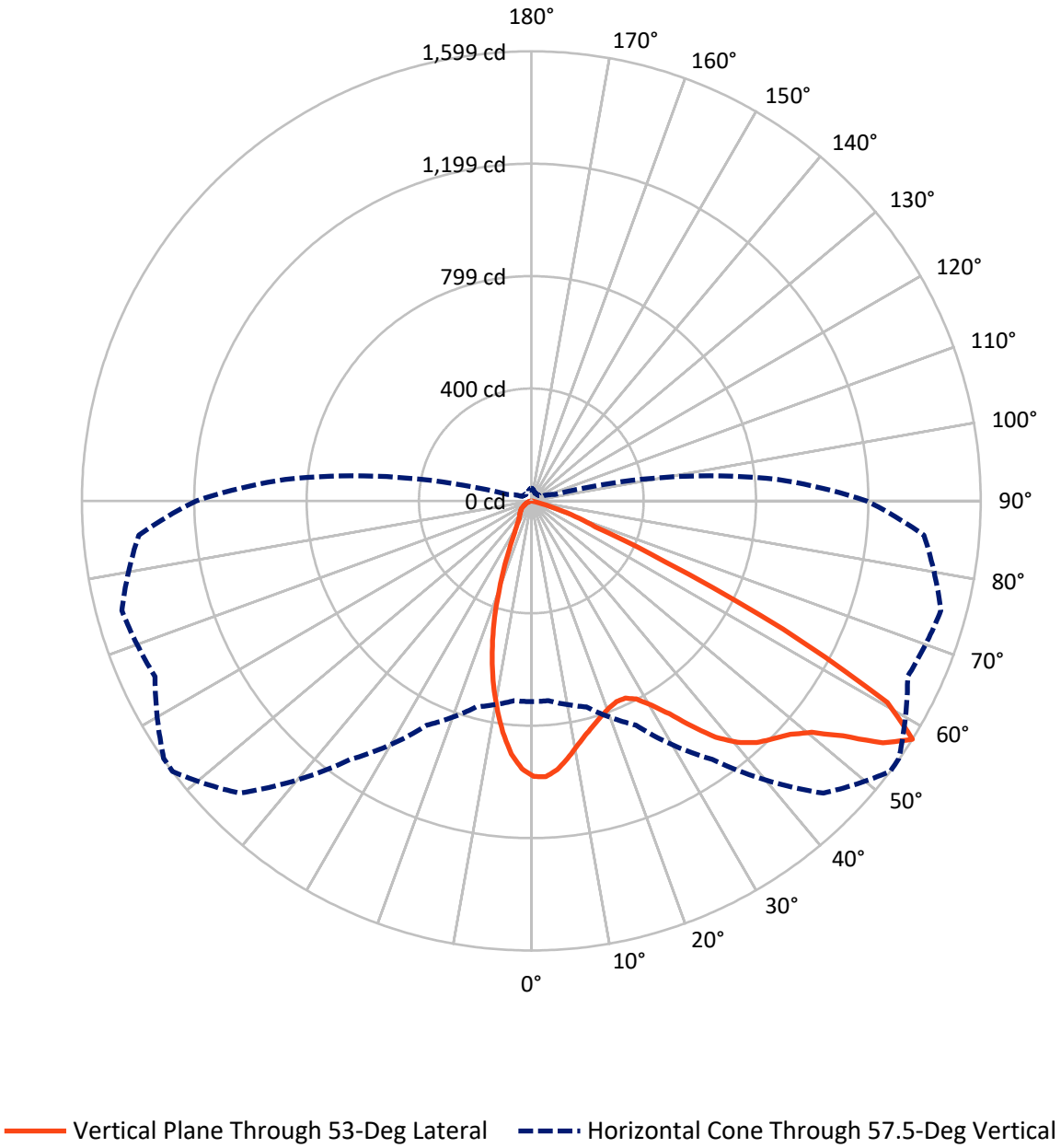
Based on 10 foot mounting height. Maximum calculated value = 9.8 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P630058
CATALOG NUMBER: GWS-SA1C-830-U-SL3-W-GRSBK

Luminous Intensity Polar Plot



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

Scaled Data Report

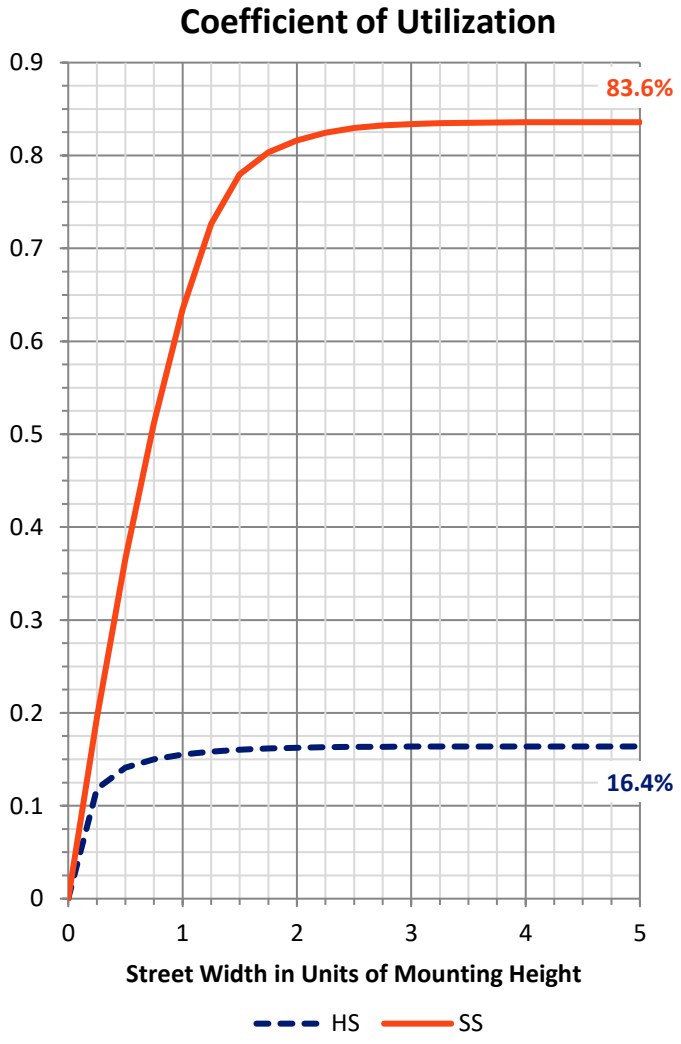
REPORT NUMBER: P630058
CATALOG NUMBER: GWS-SA1C-830-U-SL3-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	368.9	0.0	368.9
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	1864.4	0.0	1864.4
	% Fixture	83.5	0.0	83.5
Total	Lumens	2233.3	0.0	2233.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.8	3.8
10°-20°	184.0	8.2
20°-30°	239.7	10.7
30°-40°	347.7	15.6
40°-50°	501.7	22.5
50°-60°	606.8	27.2
60°-70°	247.3	11.1
70°-80°	22.2	1.0
80°-90°	0.0	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°	2233.3	100.0
0°-180°	2233.3	100.0



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

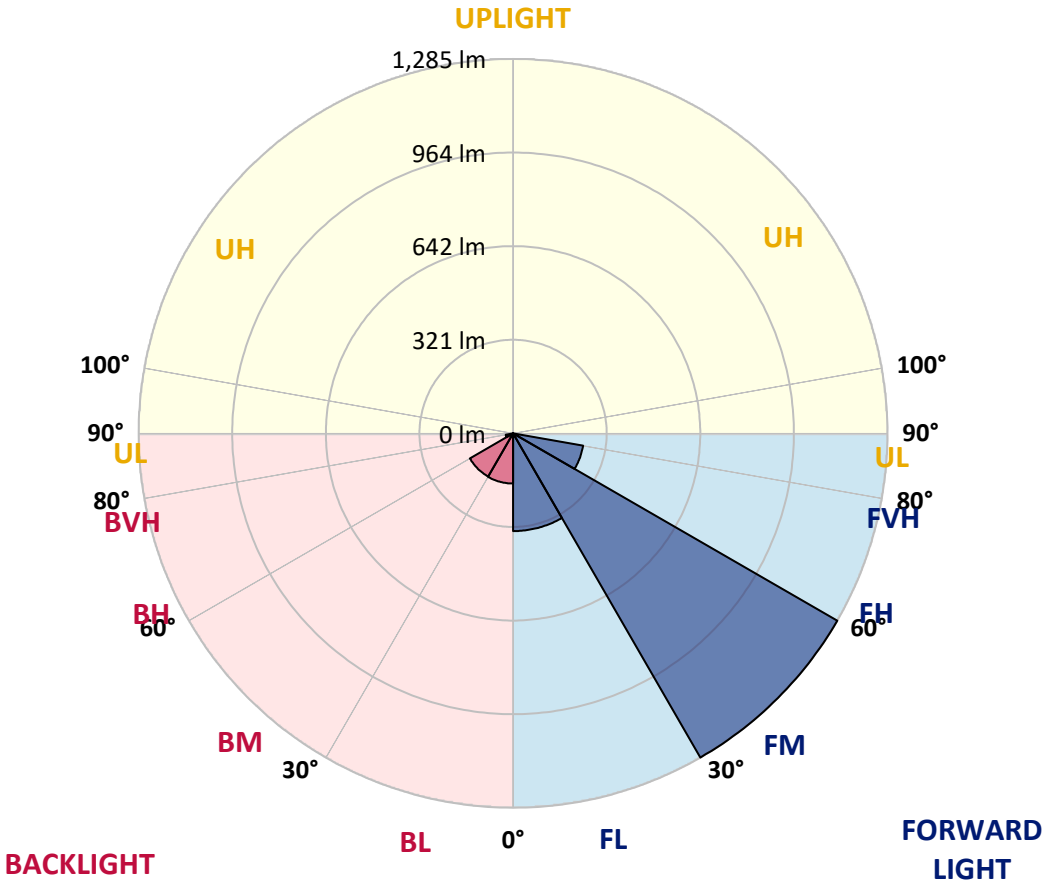
Scaled Data Report

REPORT NUMBER: P630058
CATALOG NUMBER: GWS-SA1C-830-U-SL3-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	335.4	15.0			
FM	(30°-60°)	1285.0	57.5			
FH	(60°-80°)	244.0	10.9			G0/660
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	172.2	7.7	B1/500		
BM	(30°-60°)	171.2	7.7	B0/220		
BH	(60°-80°)	25.5	1.1	B0/110		G0/110
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-G0
Type II Short



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

Scaled Data Report

REPORT NUMBER: P630058
CATALOG NUMBER: GWS-SA1C-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	979.7	979.7	979.7	979.7	979.7	979.7	*979.7*	979.7	979.7	979.7	979.7
2.5°	966.0	968.2	972.0	976.9	980.2	981.8	*981.8*	986.5	983.5	981.0	978.3
5°	924.6	926.8	932.0	940.0	947.9	953.6	*960.2*	965.1	967.1	967.1	962.4
7.5°	866.3	869.3	872.6	883.6	900.8	913.7	*924.9*	932.0	942.4	945.7	939.1
10°	803.6	806.7	814.1	829.1	848.8	868.0	*887.1*	896.2	914.0	923.3	915.9
12.5°	750.5	751.9	761.8	779.8	805.0	831.3	*854.6*	863.9	889.1	903.0	894.3
15°	706.8	707.6	717.4	737.4	766.4	798.7	*828.0*	837.6	868.5	889.6	876.5
17.5°	673.6	673.9	682.4	704.0	734.4	770.3	*805.0*	816.8	856.8	882.2	862.5
20°	656.9	656.1	662.1	681.0	709.8	745.6	*786.7*	801.2	850.2	881.1	851.8
22.5°	657.2	655.3	657.8	671.2	695.5	729.2	*775.2*	791.6	850.7	885.8	842.8
25°	672.8	670.1	670.6	677.7	695.0	725.6	*776.8*	794.3	861.7	901.4	839.5
27.5°	699.1	696.1	696.1	699.6	708.9	736.9	*797.4*	817.3	891.0	931.8	846.3
30°	733.0	730.0	728.9	732.5	740.1	765.9	*843.1*	863.9	941.1	981.6	868.2
32.5°	771.9	768.3	770.3	775.2	782.6	818.2	*901.9*	929.6	1003.7	1048.6	907.7
35°	813.0	809.9	818.7	829.4	840.9	890.7	*983.2*	1007.3	1080.7	1132.1	967.9
37.5°	852.1	850.7	869.1	891.5	915.3	977.7	*1065.9*	1084.5	1146.6	1223.0	1041.5
40°	891.2	891.0	922.4	961.9	999.9	1064.5	*1128.6*	1143.9	1186.9	1293.6	1112.1
42.5°	935.0	935.0	978.6	1031.1	1081.8	1137.9	*1174.5*	1181.4	1204.9	1334.4	1165.2
45°	976.9	979.4	1029.7	1090.8	1150.7	1195.1	*1206.3*	1206.8	1212.3	1358.5	1209.3
47.5°	1010.0	1012.2	1072.4	1142.8	1207.4	1238.6	*1240.2*	1237.8	1231.8	1381.5	1243.2
50°	1036.9	1040.1	1103.1	1177.6	1246.3	1280.5	*1293.1*	1290.6	1275.3	1406.1	1267.1
52.5°	1050.0	1054.7	1113.8	1194.8	1289.5	1352.2	*1387.2*	1393.0	1340.4	1419.8	1289.8
55°	944.9	951.7	1006.2	1117.1	1313.6	1463.0	*1518.1*	1517.0	1411.0	1460.6	1345.1
57.5°	*713.6*	*713.0*	*758.2*	*879.5*	*1122.0*	*1469.3*	*1598.5*	*1596.3*	*1477.0*	*1507.9*	*1401.7*
60°	485.9	482.6	494.6	553.2	784.5	1197.0	*1454.8*	1484.4	1430.2	1393.0	1190.1
62.5°	399.9	396.9	393.1	376.9	450.5	745.6	*1005.1*	1050.0	1042.9	968.2	746.4
65°	327.4	329.8	340.5	333.7	313.4	382.4	*521.7*	548.3	501.2	421.8	260.9
67.5°	241.4	242.5	256.5	292.6	281.7	254.6	*245.5*	249.9	146.4	67.3	43.5
70°	142.6	143.4	156.3	204.7	228.6	195.4	*165.9*	163.4	58.0	18.1	19.7
72.5°	80.7	79.1	81.6	97.4	124.5	103.7	*85.4*	77.7	17.5	10.1	10.1
75°	38.3	37.2	32.0	30.1	27.4	17.5	*10.9*	9.3	4.4	4.1	4.1
77.5°	0.3	0.8	0.5	0.8	0.8	0.5	*0.3*	0.3	0.8	0.8	1.1
80°	0.0	0.0	0.0	0.0	0.0	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

Scaled Data Report

REPORT NUMBER: P630058
CATALOG NUMBER: GWS-SA1C-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	979.7	979.7	979.7	979.7	979.7	979.7	979.7	979.7	979.7	979.7	979.7
2.5°	973.4	965.1	963.2	962.7	955.0	946.8	938.3	935.0	930.1	927.1	929.6
5°	955.0	943.2	932.8	923.3	906.3	887.7	871.5	861.1	851.3	844.7	846.3
7.5°	929.0	913.7	889.9	865.5	834.3	806.4	775.2	756.0	738.2	728.4	733.0
10°	901.4	881.1	843.1	801.7	752.7	708.9	664.3	627.9	606.8	586.9	589.1
12.5°	874.3	847.4	790.5	727.8	666.0	601.4	534.0	483.7	449.2	424.3	420.4
15°	849.1	814.6	739.3	656.7	572.4	486.4	400.5	328.5	288.5	263.9	262.2
17.5°	826.6	783.9	686.2	582.2	476.6	366.5	267.7	213.8	190.8	180.1	179.0
20°	805.0	753.0	632.0	506.7	372.0	257.3	184.8	159.9	152.5	148.1	148.6
22.5°	784.2	719.3	575.1	422.9	278.9	180.7	143.2	133.6	132.8	133.3	133.6
25°	766.7	688.4	516.5	342.2	199.0	137.7	119.6	116.9	119.3	122.9	123.4
27.5°	757.7	663.2	459.3	260.9	144.0	112.0	103.7	104.8	109.2	113.0	113.6
30°	760.1	644.3	400.2	189.1	110.9	94.4	91.7	93.9	98.3	101.8	102.4
32.5°	777.6	634.8	339.7	137.7	91.1	82.4	81.3	82.9	86.8	89.5	89.8
35°	812.4	637.0	282.2	105.4	78.3	73.4	73.1	74.2	76.1	78.0	78.3
37.5°	863.6	654.7	225.5	87.6	70.9	67.3	66.2	66.2	67.6	68.4	69.0
40°	918.6	681.6	180.7	77.5	65.7	61.9	59.7	58.9	59.9	61.0	61.3
42.5°	964.1	708.4	146.7	70.3	61.6	56.4	53.6	53.1	54.5	56.4	56.9
45°	998.8	729.2	122.4	64.6	56.9	51.2	48.2	48.2	50.6	53.9	54.5
47.5°	1030.6	745.9	104.3	59.4	52.6	46.5	43.5	44.1	48.2	52.6	53.4
50°	1052.2	759.3	90.9	54.7	49.0	42.7	40.0	41.1	46.0	51.2	52.0
52.5°	1075.5	775.7	82.1	50.6	45.7	39.7	37.2	38.0	43.5	49.3	50.4
55°	1139.8	830.7	81.8	45.2	40.0	35.6	34.5	34.8	40.2	46.8	48.2
57.5°	*1192.3*	*879.2*	*87.3*	*38.0*	*33.4*	*31.2*	*30.7*	*30.9*	*35.9*	*43.2*	*44.9*
60°	986.5	683.2	72.3	31.5	27.9	27.4	26.6	27.1	31.8	38.3	39.7
62.5°	583.9	390.6	34.5	24.1	23.8	23.3	22.4	23.5	27.9	33.7	34.5
65°	199.5	115.8	21.9	19.7	20.3	19.4	18.6	19.7	23.5	26.8	27.1
67.5°	38.3	30.7	17.5	16.4	16.7	15.1	14.8	15.9	18.1	18.6	18.3
70°	20.0	17.8	13.4	13.4	12.9	10.7	10.7	11.8	11.8	10.9	10.7
72.5°	10.4	9.9	8.8	9.9	8.2	6.6	6.6	7.1	6.6	5.5	5.5
75°	4.1	4.1	3.8	4.9	3.6	3.0	2.7	3.3	2.5	1.9	1.9
77.5°	1.1	1.1	1.1	1.4	0.8	0.8	0.5	0.5	0.3	0.0	0.0
80°	0.0	0.3	0.0	0.3	0.0	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

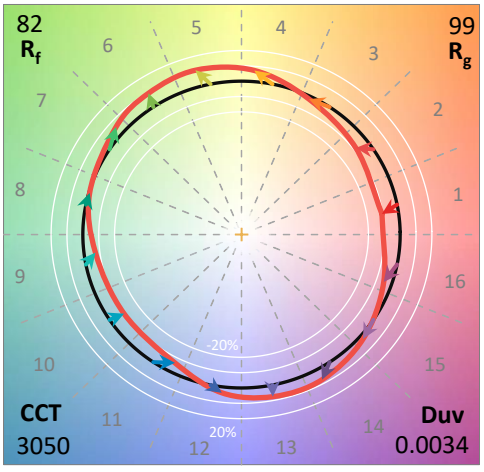
Test Information

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

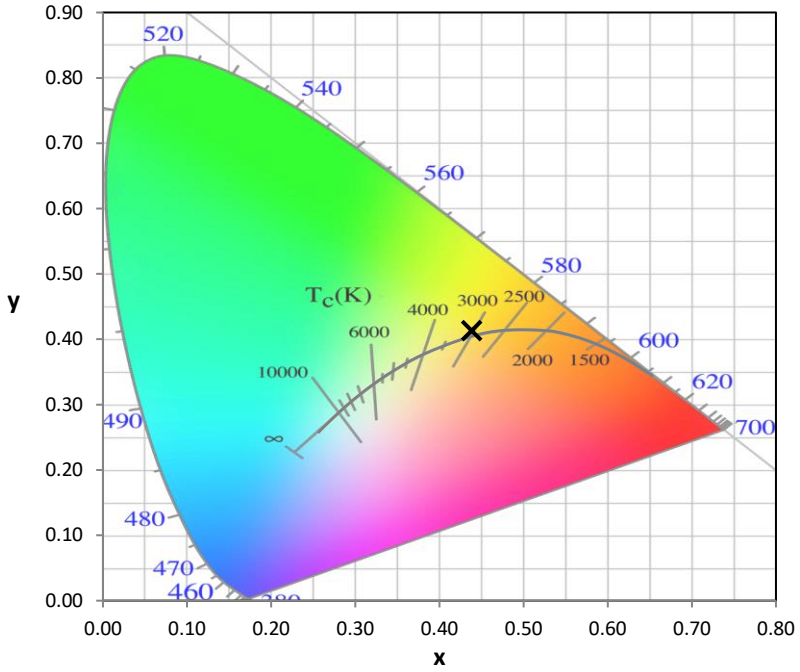
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

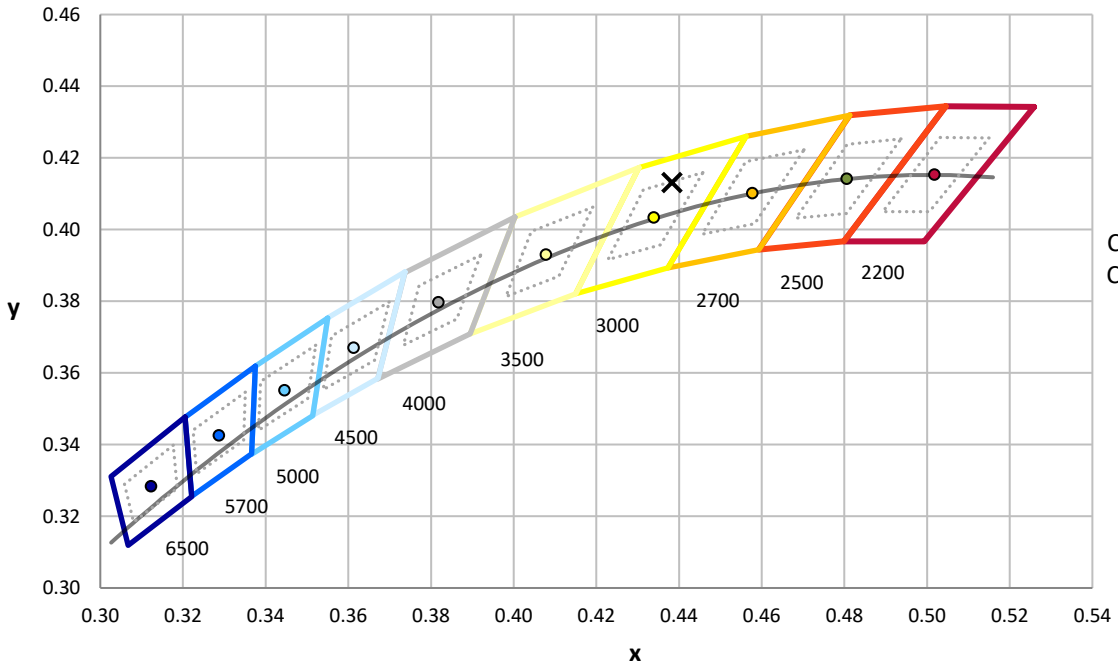
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

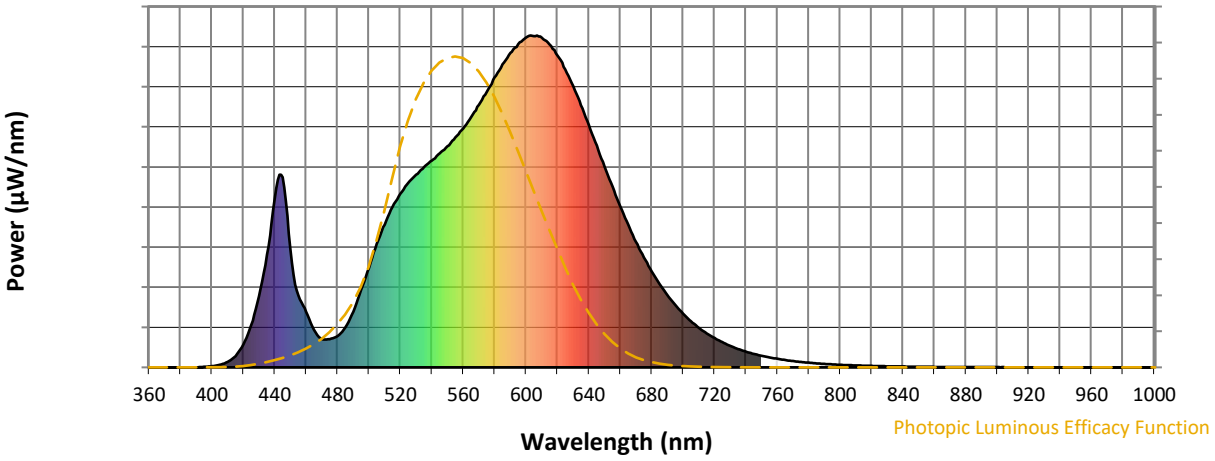


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

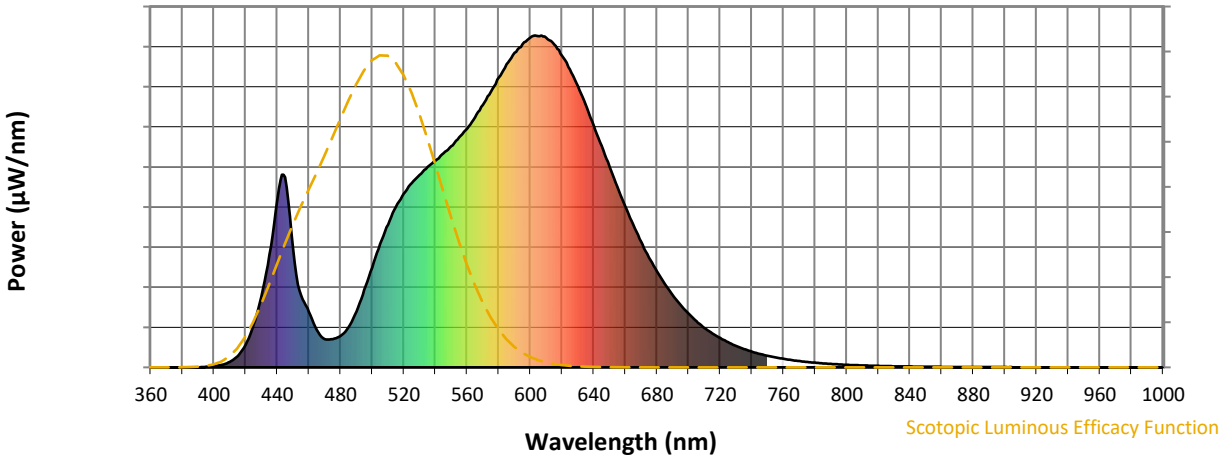


Photopic Lumens: NR

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

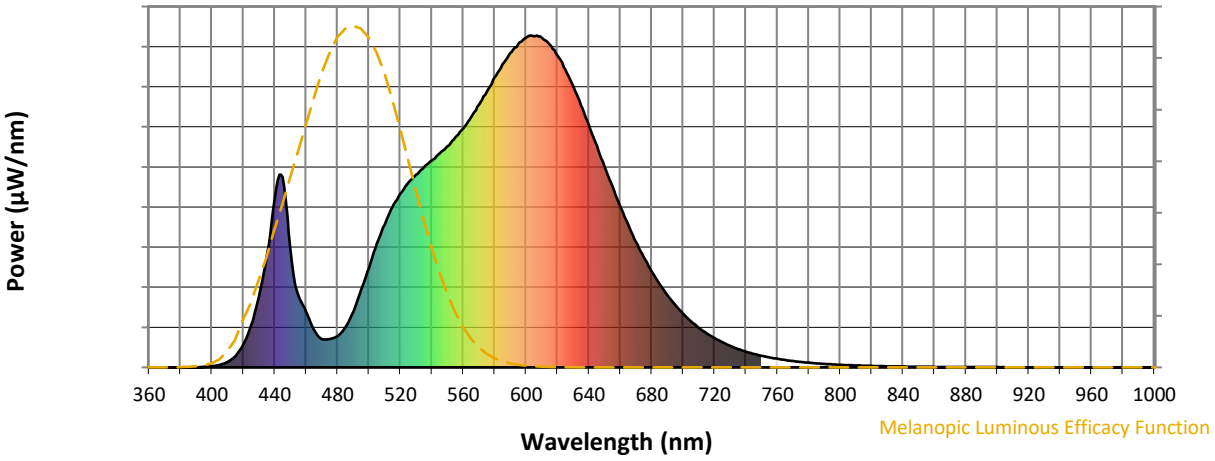


Scotopic Lumens: NR **S/P: 1.27**

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			

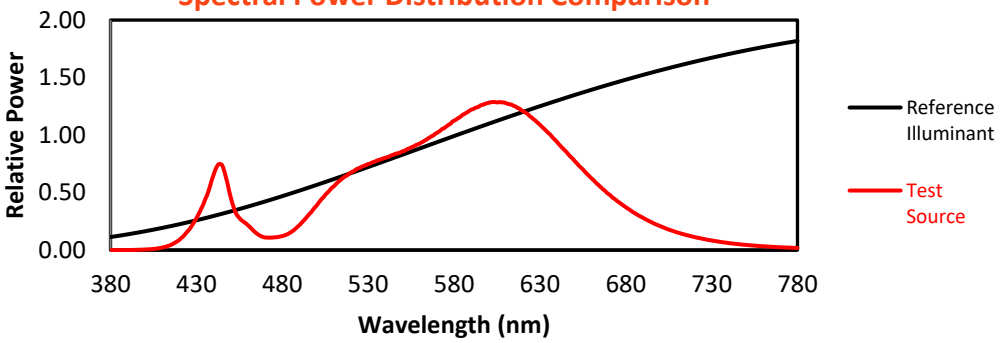
REPORT NUMBER: SP1-2408-195-9

TM-30-18

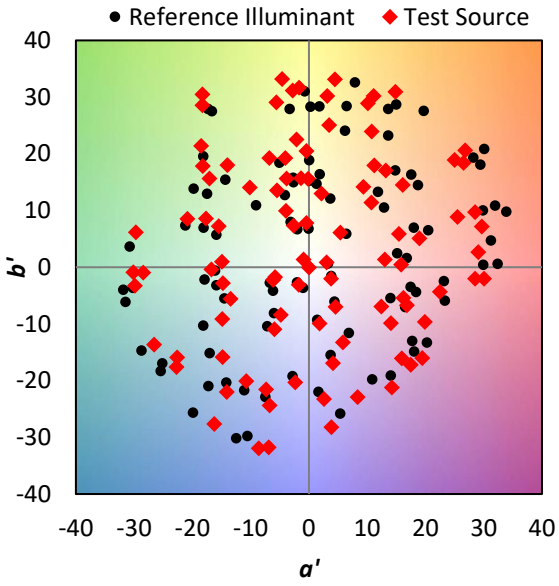
Summary

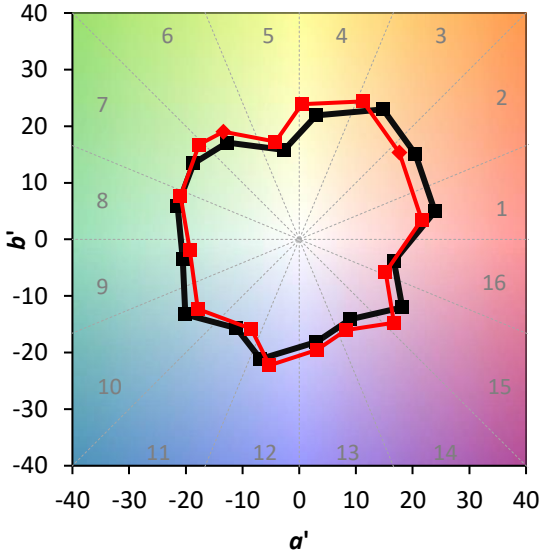
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

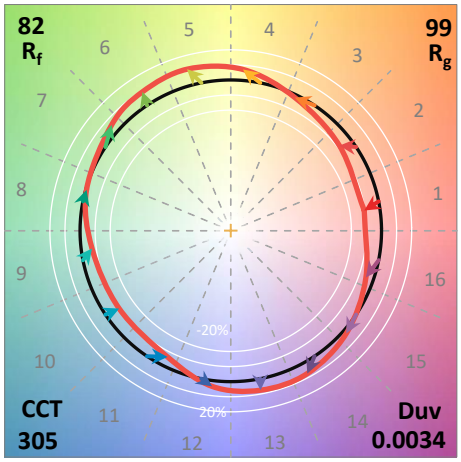
Spectral Power Distribution Comparison

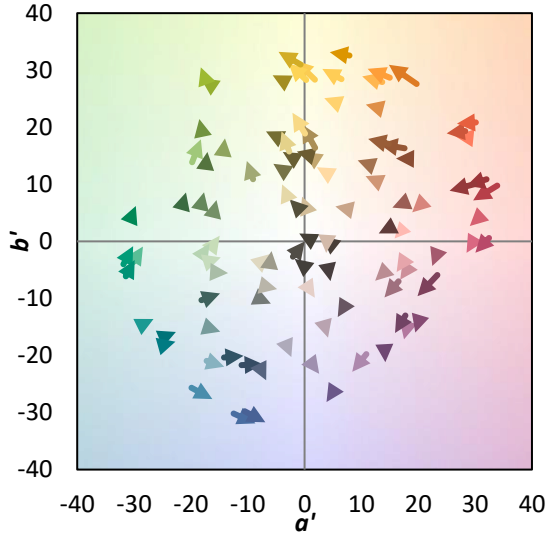


Color Vector Graphics







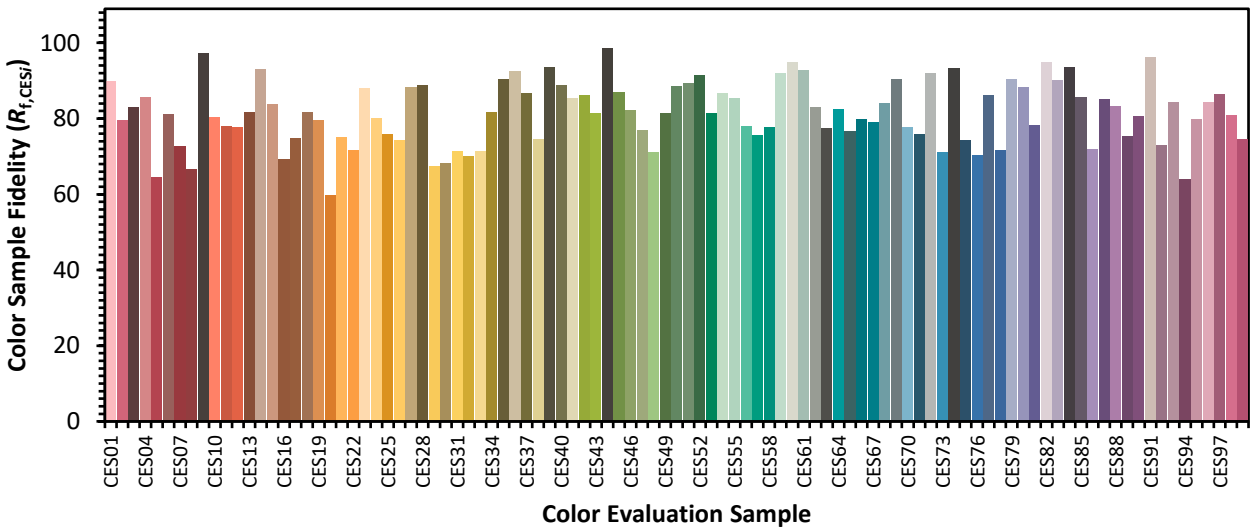


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

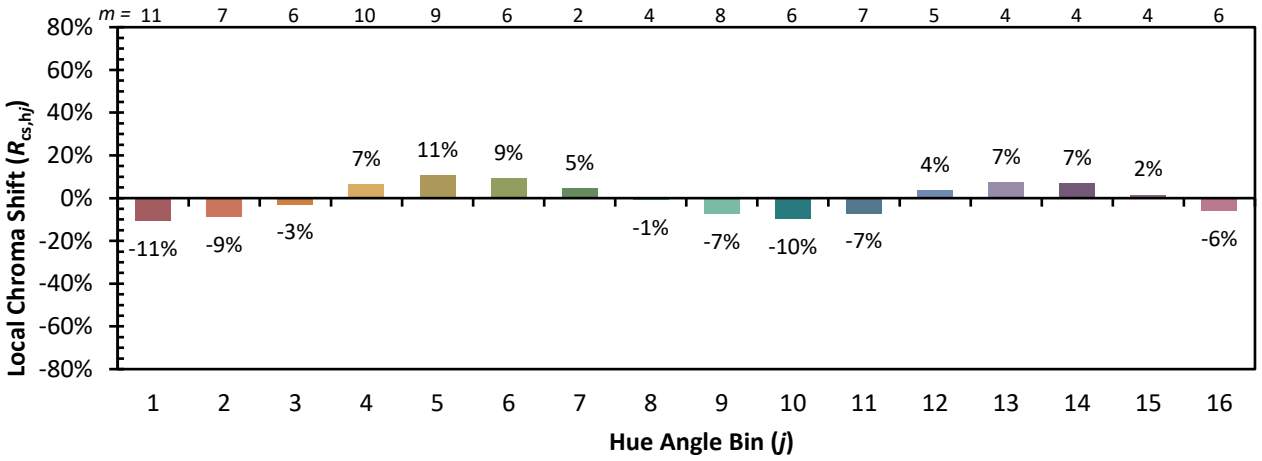
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

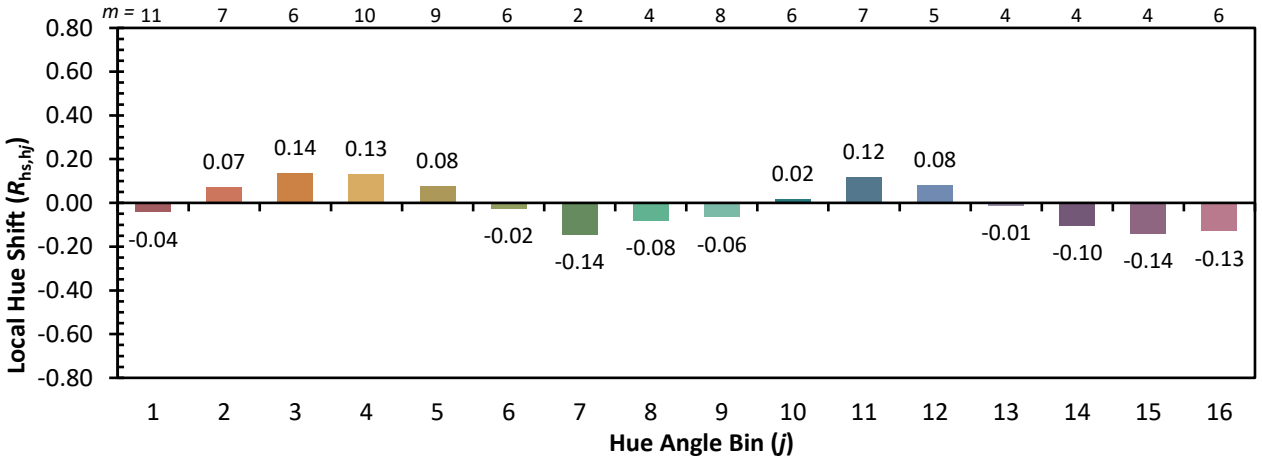


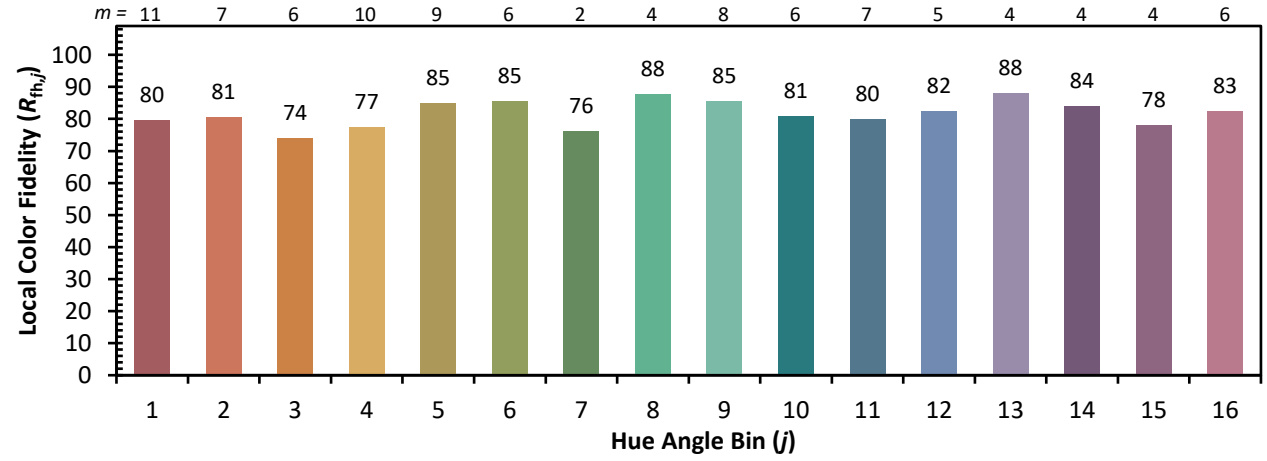
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



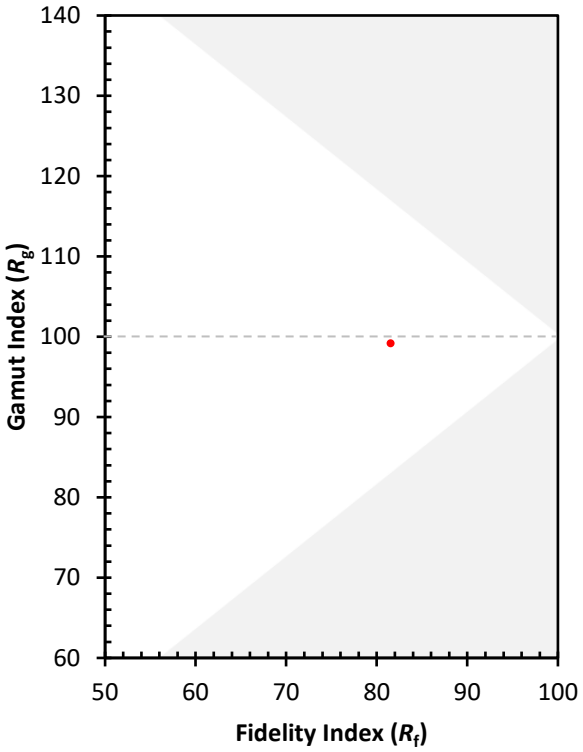


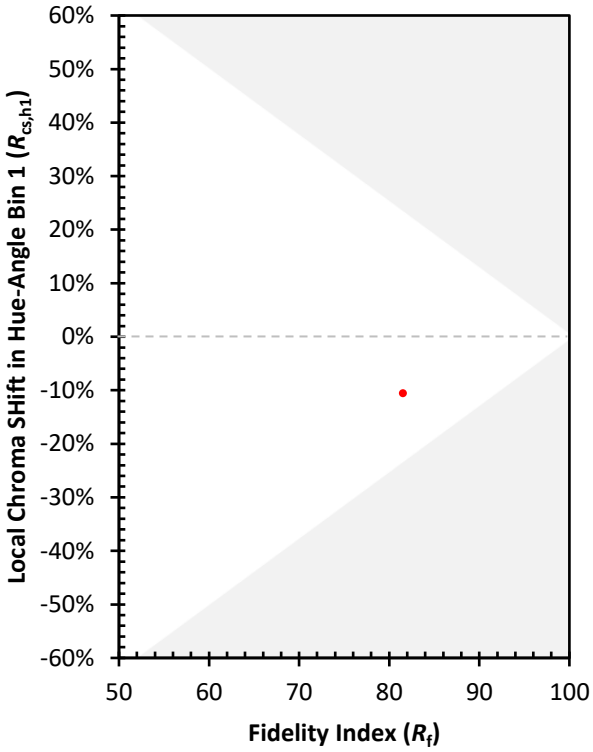


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)