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: P629069

Luminaire Tested: GWS-SA1A-830-U-SL2-W

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:	P629069
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-27)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1A-830-U-SL2-W
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2219.9 lumens
Efficiency:	N/A
Efficacy:	112.7 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G1

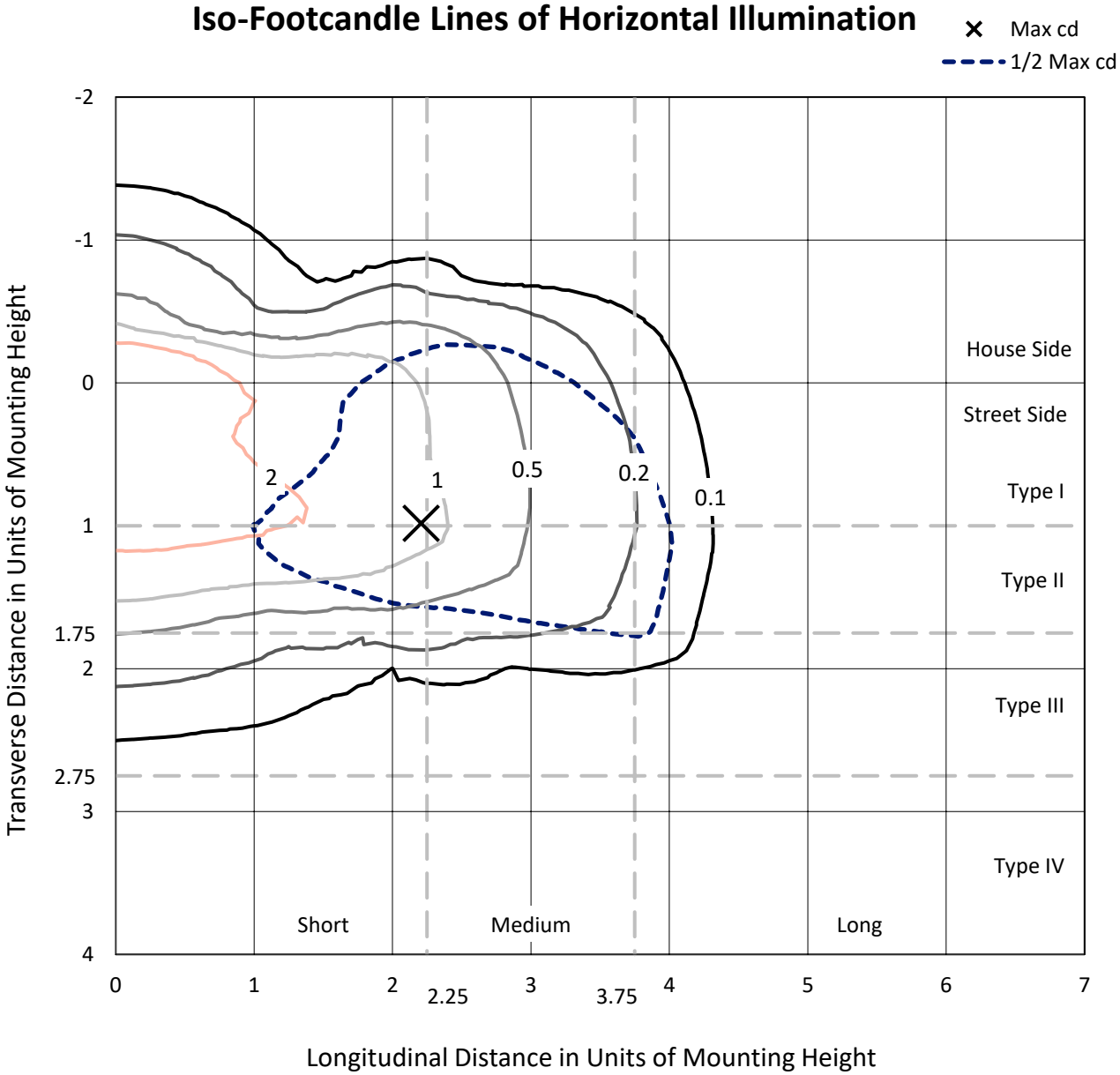
Input Watts (W):	19.7
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P629069
CATALOG NUMBER: GWS-SA1A-830-U-SL2-W

Iso-Footcandle Lines of Horizontal Illumination



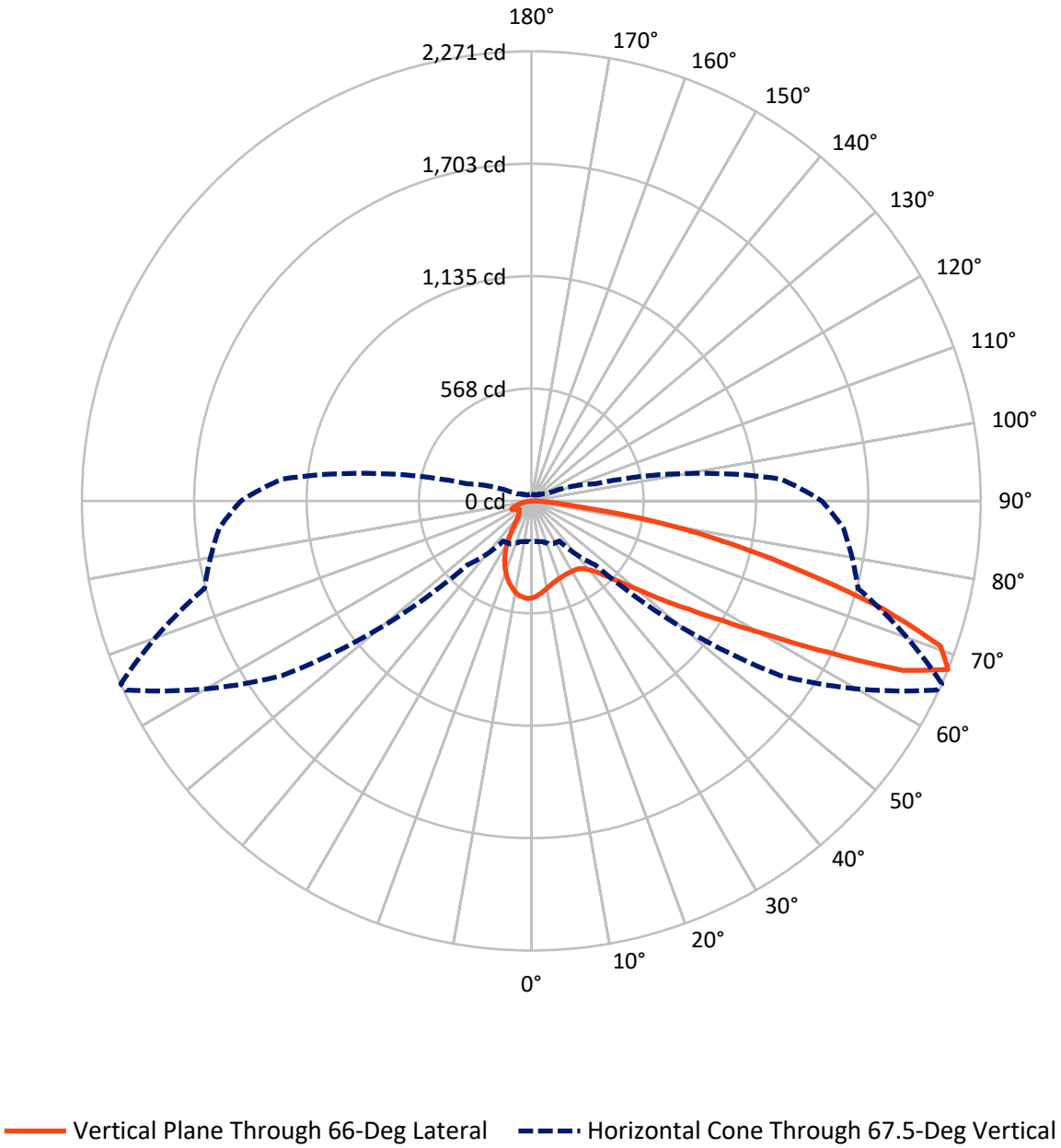
Based on 10 foot mounting height. Maximum calculated value = 4.9 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P629069
CATALOG NUMBER: GWS-SA1A-830-U-SL2-W

Luminous Intensity Polar Plot



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

Scaled Data Report

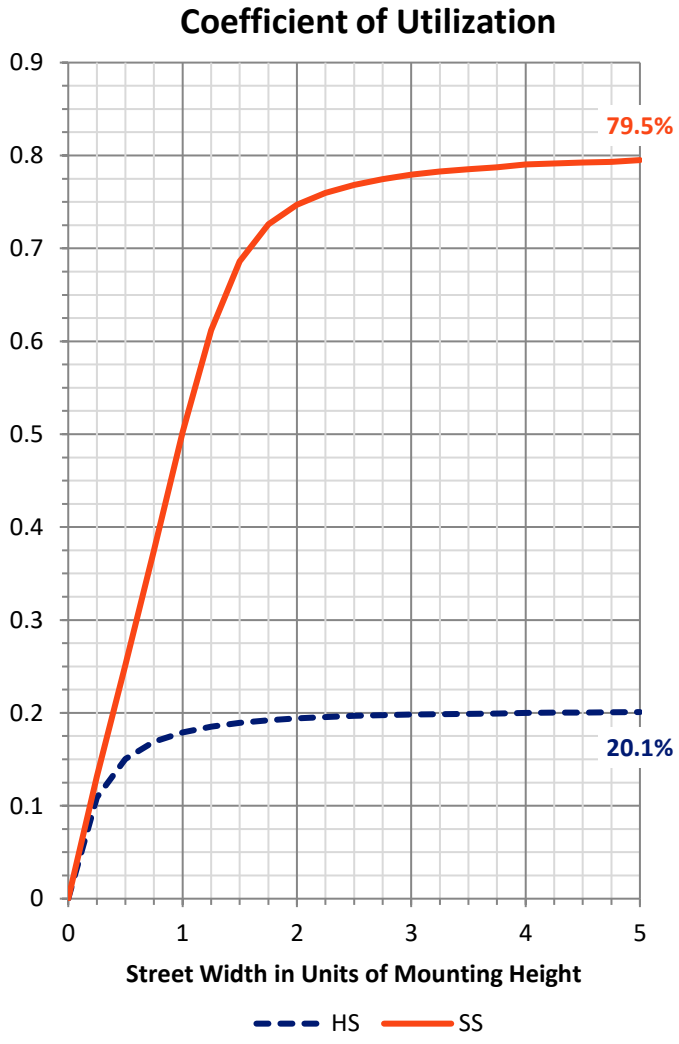
REPORT NUMBER: P629069
CATALOG NUMBER: GWS-SA1A-830-U-SL2-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	450.5	0.0	450.5
	% Fixture	20.3	0.0	20.3
Street Side	Lumens	1769.4	0.0	1769.4
	% Fixture	79.7	0.0	79.7
Total	Lumens	2219.9	0.0	2219.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.1	1.9
10°-20°	105.8	4.8
20°-30°	145.4	6.6
30°-40°	198.8	9.0
40°-50°	301.3	13.6
50°-60°	468.3	21.1
60°-70°	570.2	25.7
70°-80°	347.3	15.6
80°-90°	39.7	1.8
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°	2219.9	100.0
0°-180°	2219.9	100.0



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

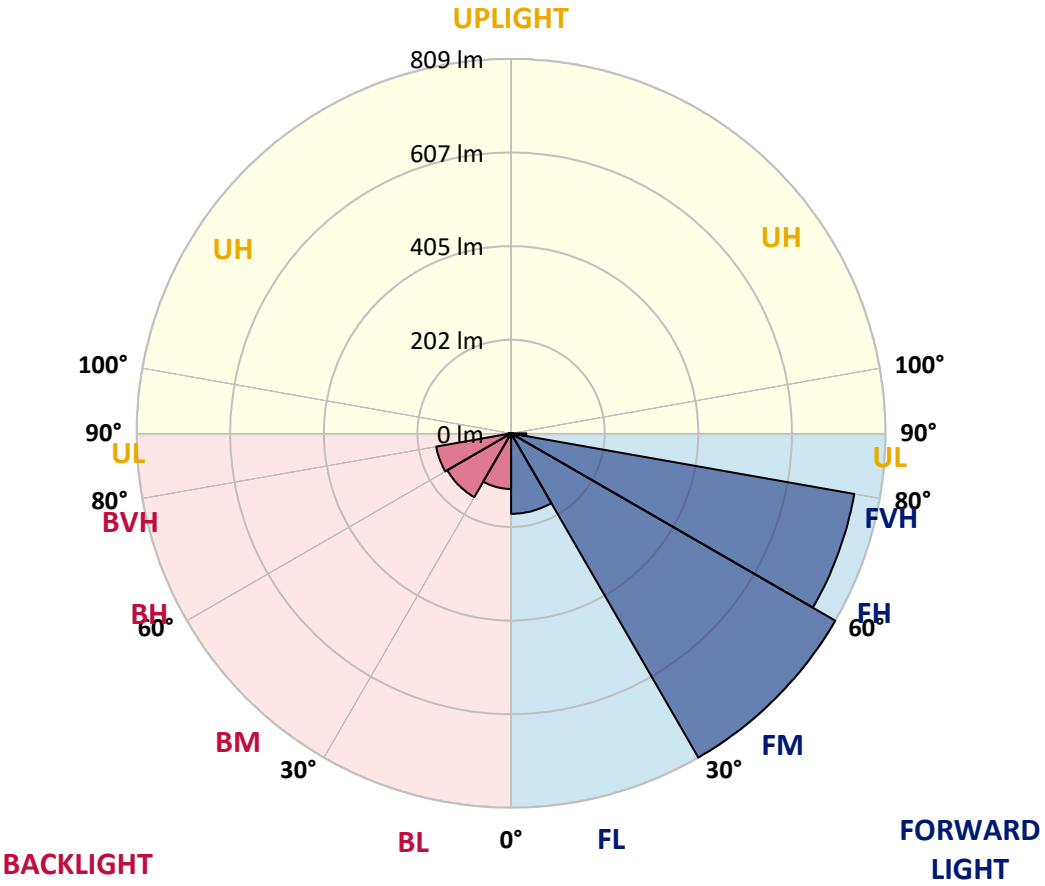
Scaled Data Report

REPORT NUMBER: P629069
CATALOG NUMBER: GWS-SA1A-830-U-SL2-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	173.9	7.8			
FM	(30°-60°)	809.2	36.5			
FH	(60°-80°)	753.3	33.9			G1/1800
FVH	(80°-90°)	33.0	1.5			G1/100
BL	(0°-30°)	120.3	5.4	B1/500		
BM	(30°-60°)	159.2	7.2	B0/220		
BH	(60°-80°)	164.3	7.4	B1/500		G1/500
BVH	(80°-90°)	6.7	0.3			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: P629069
CATALOG NUMBER: GWS-SA1A-830-U-SL2-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5	*490.5*	490.5	490.5
2.5°	459.4	461.1	460.1	466.2	466.6	474.3	478.7	482.4	*482.8*	487.6	490.9
5°	428.0	429.0	429.0	434.8	438.7	449.1	459.1	469.8	*470.6*	482.3	491.2
7.5°	402.6	403.6	402.9	410.7	415.7	427.2	440.0	456.4	*458.0*	476.8	492.3
10°	382.7	382.4	384.0	391.1	397.6	411.3	425.6	444.2	*446.6*	470.5	493.6
12.5°	369.1	369.4	370.4	377.8	384.8	398.4	413.1	433.4	*436.0*	463.2	493.0
15°	362.6	361.9	362.8	369.6	376.2	388.2	403.4	424.3	*426.9*	456.7	493.1
17.5°	361.1	360.7	360.5	365.4	370.4	381.5	396.1	417.3	*420.1*	452.5	494.1
20°	365.7	365.0	363.2	365.4	367.5	376.8	390.9	412.3	*415.4*	449.7	496.0
22.5°	378.1	377.0	374.3	371.7	368.9	374.6	387.7	408.6	*411.7*	447.9	498.0
25°	397.1	396.1	393.2	387.4	377.3	376.4	387.1	407.0	*410.0*	446.6	498.8
27.5°	423.2	421.7	418.8	410.4	394.0	383.0	389.5	406.8	*409.7*	445.2	498.0
30°	454.1	453.1	451.5	441.3	419.4	397.1	395.0	408.1	*410.4*	444.4	496.4
32.5°	485.5	484.5	485.8	481.0	454.1	420.4	407.0	411.7	*413.3*	444.2	494.9
35°	513.2	514.3	523.7	524.5	498.1	452.0	425.9	419.9	*420.3*	447.5	495.6
37.5°	542.2	546.6	558.9	569.4	547.4	493.8	454.1	435.5	*435.1*	455.7	499.6
40°	580.6	582.5	598.2	618.0	604.2	551.1	494.1	460.9	*458.6*	472.6	510.5
42.5°	618.0	622.7	647.8	670.5	665.9	615.7	544.5	499.0	*494.9*	502.4	532.8
45°	665.6	670.1	698.3	727.5	735.7	688.8	608.9	553.0	*549.0*	547.2	573.8
47.5°	713.2	717.9	743.2	785.3	814.3	780.1	692.8	624.5	*617.8*	610.9	635.6
50°	745.3	750.8	774.9	825.4	893.5	894.1	792.2	718.1	*709.6*	698.6	722.8
52.5°	744.1	747.7	770.7	829.0	950.5	1025.1	925.4	837.3	*830.5*	806.5	827.5
55°	685.7	691.0	714.2	787.1	956.6	1149.3	1121.0	977.8	*965.7*	922.8	945.9
57.5°	568.3	572.8	596.1	686.0	902.0	1213.0	1369.4	1156.9	*1140.3*	1049.4	1076.1
60°	429.0	423.5	434.5	513.2	771.5	1214.6	1588.7	1399.9	*1372.0*	1184.8	1207.1
62.5°	321.9	316.4	318.9	341.1	523.1	1116.5	1713.7	1732.2	*1686.2*	1337.7	1333.3
65°	254.4	251.3	258.3	273.5	304.9	850.2	1714.7	2091.5	*2062.5*	1514.8	1462.7
67.5°	*207.3*	*205.3*	*212.5*	*240.7*	*247.3*	*456.9*	*1537.5*	*2259.3*	*2270.6*	*1708.9*	*1582.7*
70°	167.0	164.1	175.2	212.3	230.0	276.4	1101.4	2173.8	*2192.1*	1824.5	1548.9
72.5°	115.3	115.5	121.1	172.0	222.0	238.7	623.0	1810.1	*1849.7*	1719.7	1361.6
75°	77.7	78.4	80.0	113.5	204.5	231.6	332.0	1370.4	*1398.4*	1421.4	1125.5
77.5°	47.0	47.3	51.0	68.7	141.1	216.2	224.9	993.4	*1015.4*	937.0	697.7
80°	27.2	28.3	31.7	46.0	95.2	162.4	174.1	609.1	*634.0*	416.5	221.7
82.5°	12.0	12.8	17.3	26.7	55.5	138.1	135.9	240.7	*237.1*	116.1	76.9
85°	2.1	2.6	3.7	8.4	20.4	72.9	105.4	106.2	*99.9*	44.0	31.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.5	15.9	28.5	*28.3*	12.5	11.0
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: P629069
CATALOG NUMBER: GWS-SA1A-830-U-SL2-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5
2.5°	493.0	488.6	492.5	493.0	492.2	491.5	486.6	482.4	482.0	477.4	477.4
5°	494.7	490.7	492.6	488.9	483.1	477.1	466.7	459.6	456.4	450.5	450.5
7.5°	497.2	493.0	490.7	481.5	467.9	454.7	438.1	424.1	418.5	410.2	409.9
10°	499.4	494.1	486.3	468.3	446.6	425.8	401.5	381.7	368.3	358.4	358.4
12.5°	499.3	492.3	476.9	450.4	420.4	390.1	357.7	327.9	310.1	294.7	293.8
15°	499.0	489.4	464.9	429.5	389.8	347.9	303.8	264.9	238.5	223.5	222.2
17.5°	498.6	485.7	451.5	405.7	352.6	295.4	237.3	195.1	173.1	163.9	164.2
20°	498.6	481.5	437.1	378.3	309.6	232.6	174.1	143.5	138.0	138.5	138.9
22.5°	497.2	476.3	421.1	348.5	261.9	171.0	128.4	118.1	121.0	125.5	126.2
25°	493.8	467.7	402.4	315.5	205.0	124.5	104.8	102.8	108.2	113.8	115.5
27.5°	488.4	457.8	381.5	276.8	150.9	100.1	92.1	92.0	96.2	100.4	101.9
30°	482.8	446.8	359.5	233.7	109.3	87.1	84.1	84.1	86.2	88.7	88.4
32.5°	476.1	435.6	335.9	188.8	89.1	79.8	78.9	78.4	78.7	79.7	79.7
35°	470.5	425.8	311.6	141.4	79.8	75.8	74.8	73.7	73.2	72.6	72.9
37.5°	468.3	418.0	286.5	106.6	75.3	72.9	71.3	69.6	68.5	68.2	68.0
40°	471.7	414.7	261.4	87.8	72.1	69.8	68.0	65.9	64.9	64.9	64.9
42.5°	485.0	417.2	235.8	79.4	69.8	67.2	64.6	62.7	62.3	62.7	62.8
45°	509.3	426.6	209.2	75.1	67.9	64.6	61.5	60.1	60.1	60.4	60.4
47.5°	552.7	451.2	183.0	72.6	65.9	62.5	59.3	57.8	57.7	58.0	58.0
50°	627.9	495.6	159.4	70.8	64.5	60.9	57.7	55.7	55.2	55.1	55.1
52.5°	722.6	572.5	144.3	69.5	62.7	59.1	55.9	53.3	52.3	51.8	51.8
55°	837.1	675.0	144.3	68.5	60.4	57.0	53.3	50.7	49.2	48.6	48.6
57.5°	966.8	794.3	169.2	67.7	58.6	54.6	50.5	47.9	46.3	45.3	45.3
60°	1098.8	920.5	230.9	66.6	57.0	51.5	47.5	45.0	42.9	41.8	41.6
62.5°	1235.6	1059.5	312.2	67.2	55.9	48.6	44.2	41.5	39.7	38.5	38.4
65°	1361.0	1191.8	383.3	72.2	56.0	46.0	40.5	38.1	36.6	35.1	35.0
67.5°	*1467.4*	*1264.8*	*333.4*	*82.4*	*59.4*	*42.9*	*36.8*	*34.3*	*33.0*	*32.1*	*31.9*
70°	1392.9	1153.4	189.2	88.7	64.1	39.7	32.6	30.9	29.6	29.0	28.8
72.5°	1191.1	976.5	126.5	78.4	58.5	35.5	28.7	27.4	26.4	25.6	25.4
75°	964.9	774.4	96.7	64.3	45.5	28.8	24.6	23.6	22.7	21.9	21.7
77.5°	570.9	447.5	71.3	50.9	32.1	22.5	20.4	19.6	18.6	18.0	17.8
80°	182.2	155.5	45.2	35.0	21.2	17.3	15.7	15.1	14.1	13.3	13.1
82.5°	69.5	60.1	24.0	17.8	14.1	11.8	10.5	9.9	9.2	8.4	8.3
85°	30.8	28.8	13.3	9.6	7.6	5.8	5.2	4.9	4.0	3.4	3.2
87.5°	10.9	10.9	5.7	2.8	1.6	0.8	0.5	0.2	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

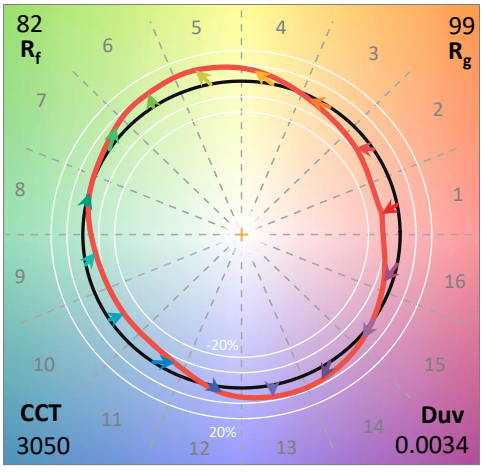
Test Information

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

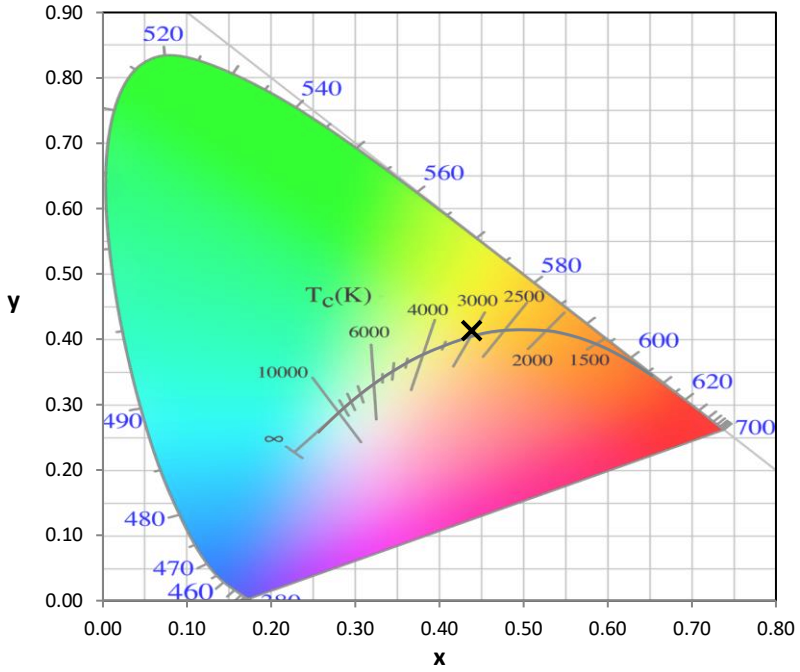
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

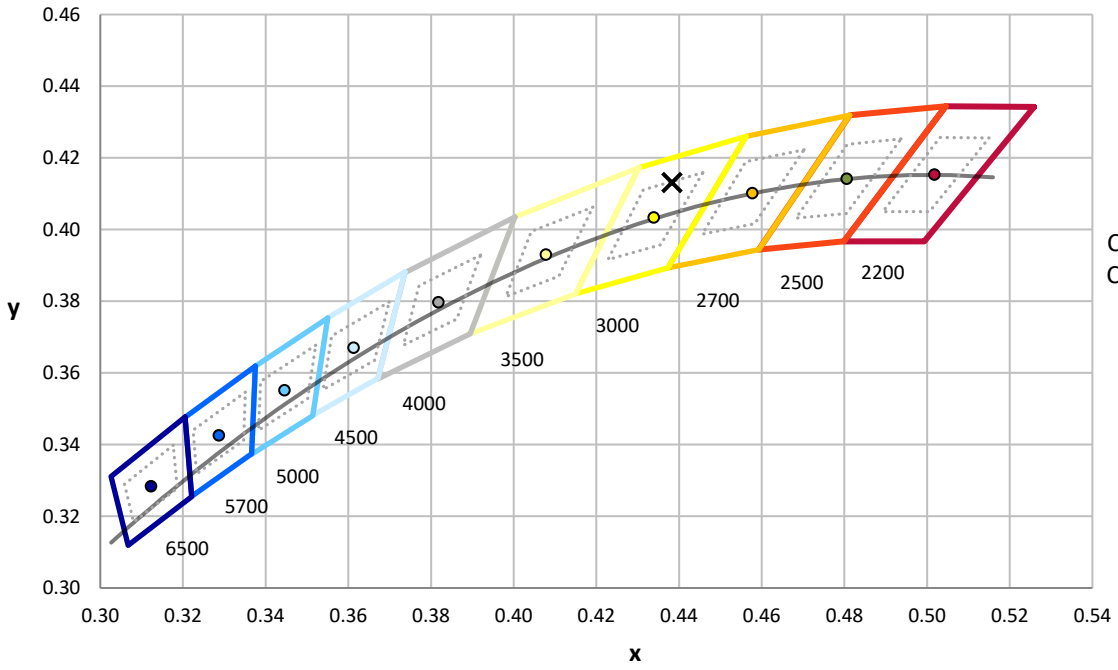
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

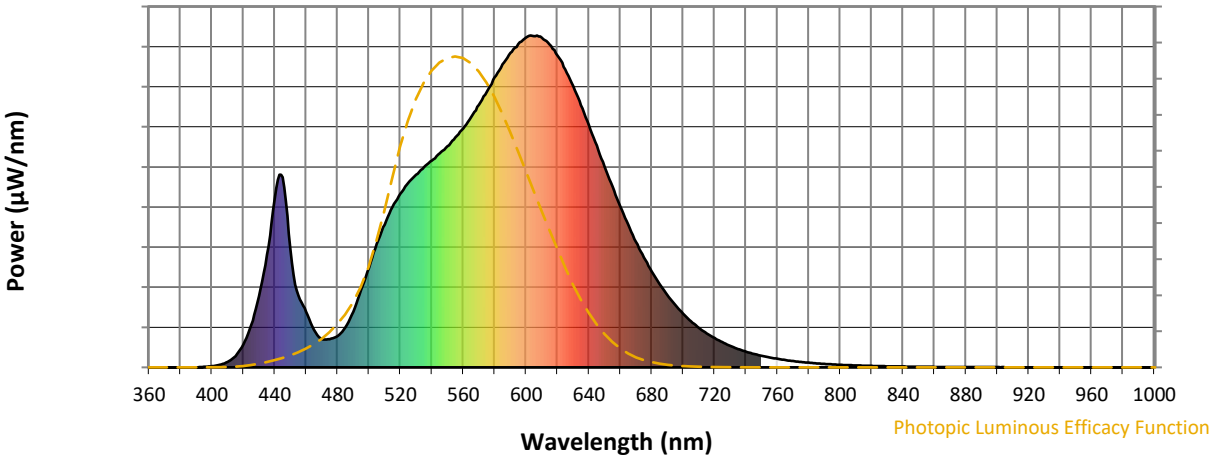


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

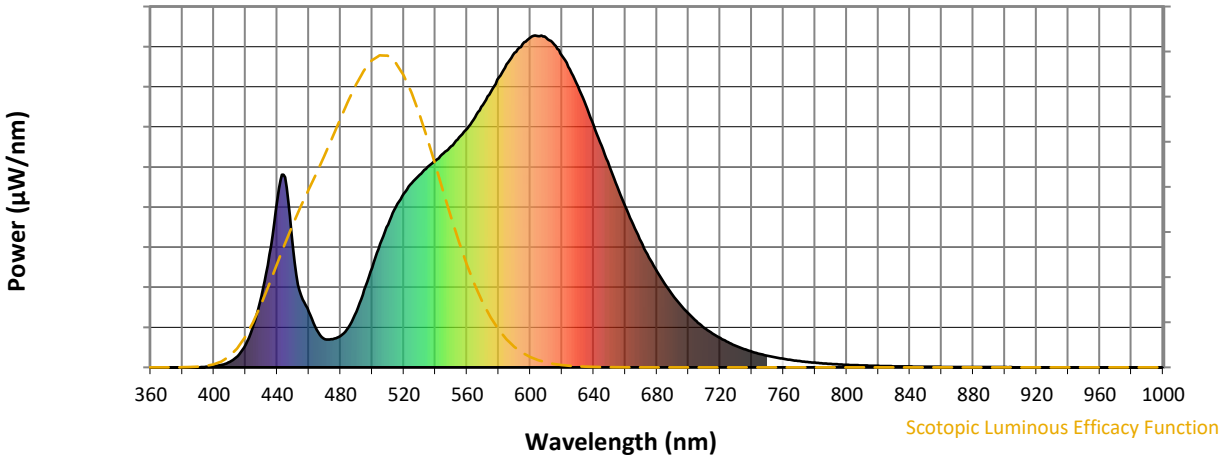


Photopic Lumens: NR

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

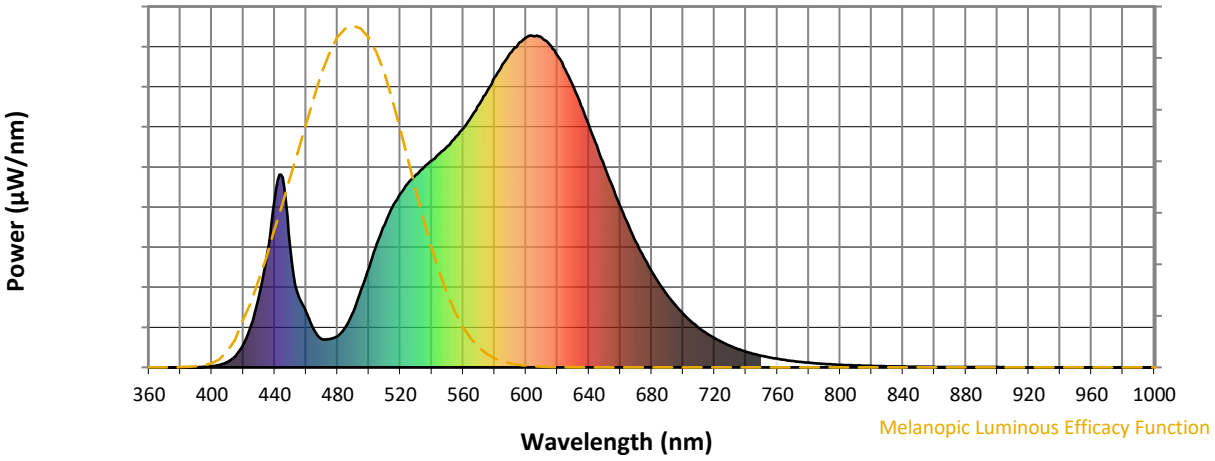


Scotopic Lumens: NR **S/P: 1.27**

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			

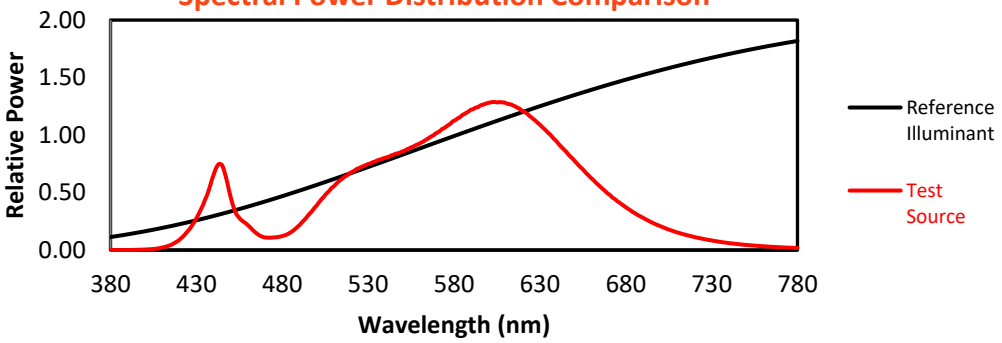
REPORT NUMBER: SP1-2408-195-9

TM-30-18

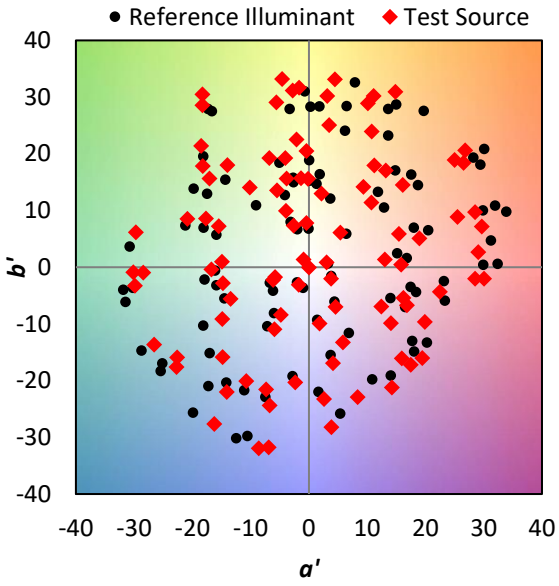
Summary

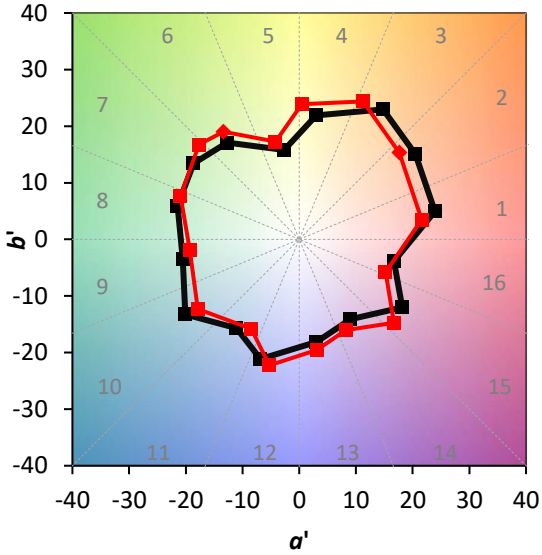
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

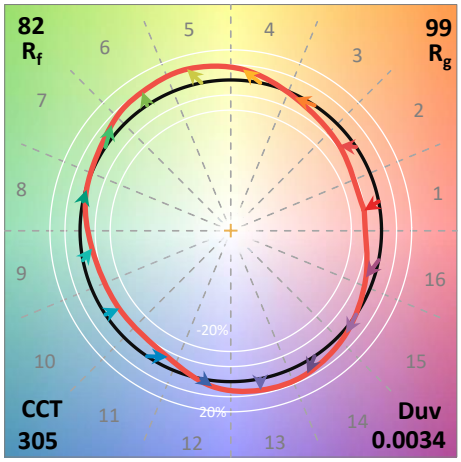
Spectral Power Distribution Comparison

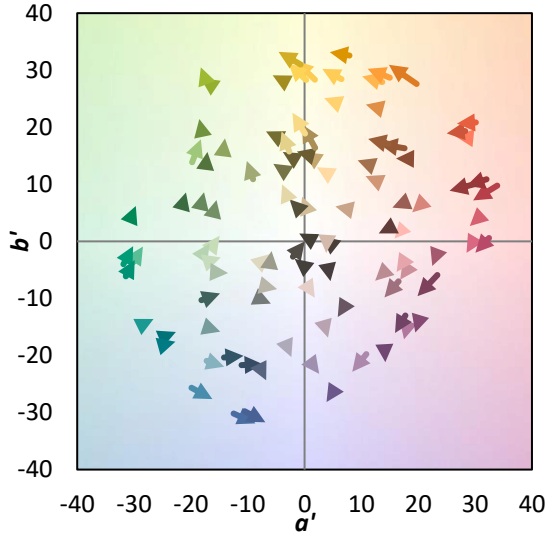


Color Vector Graphics







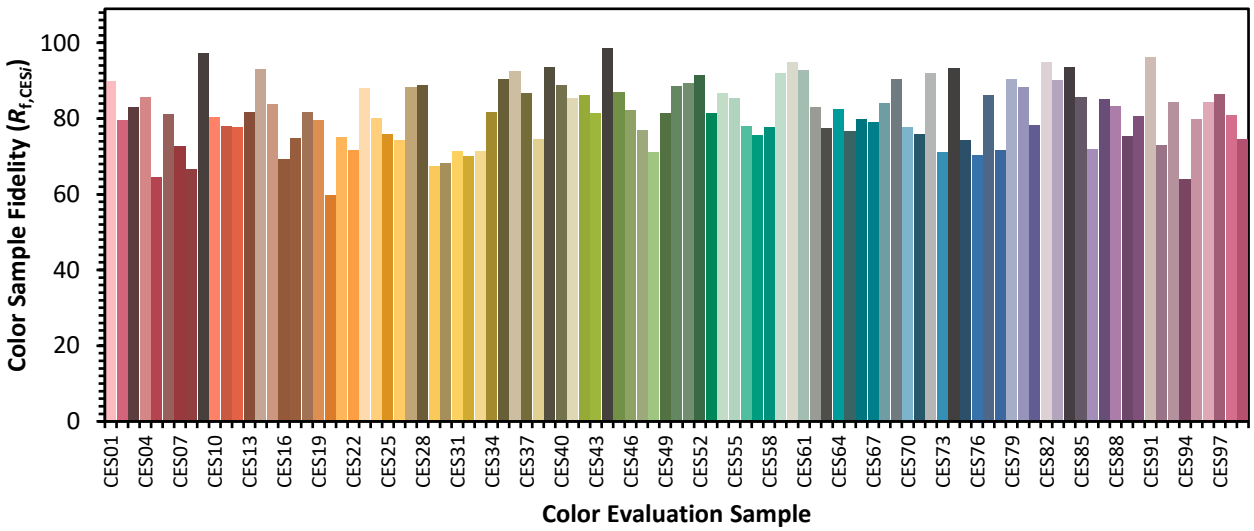


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

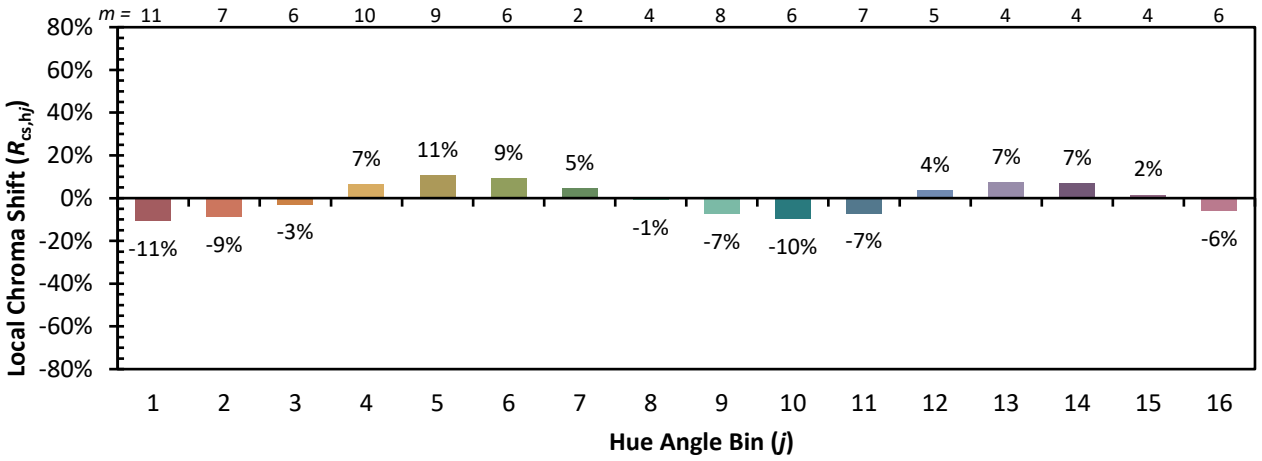
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

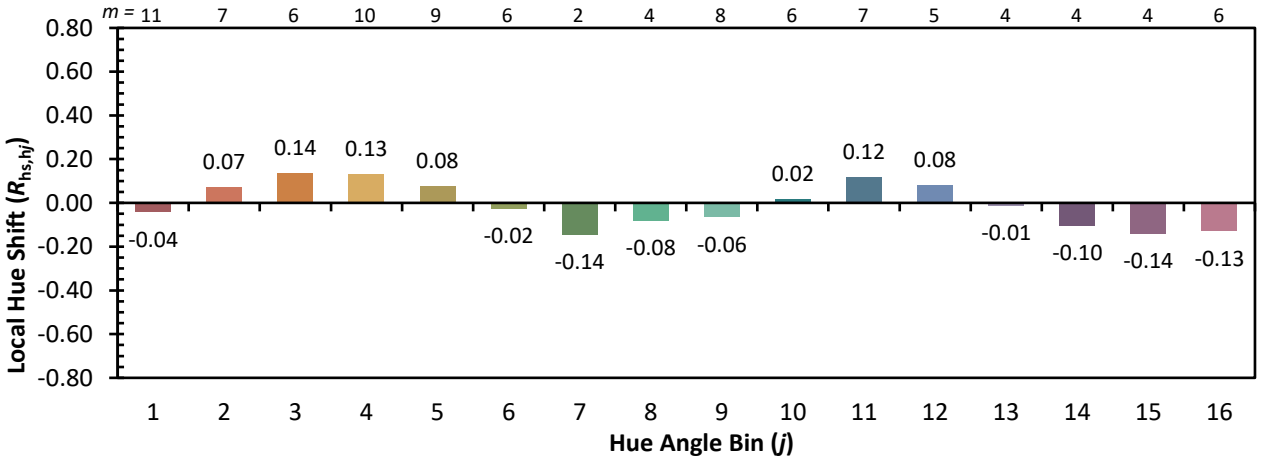


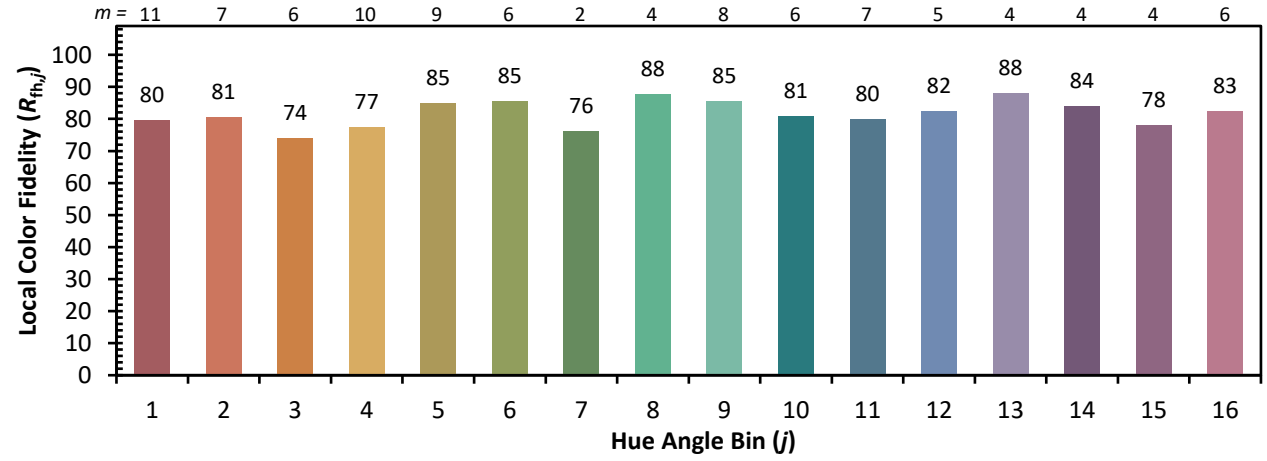
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



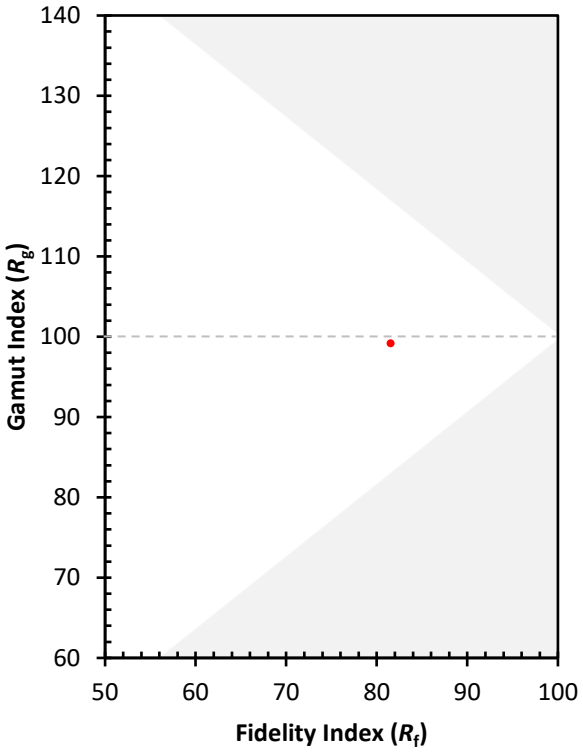


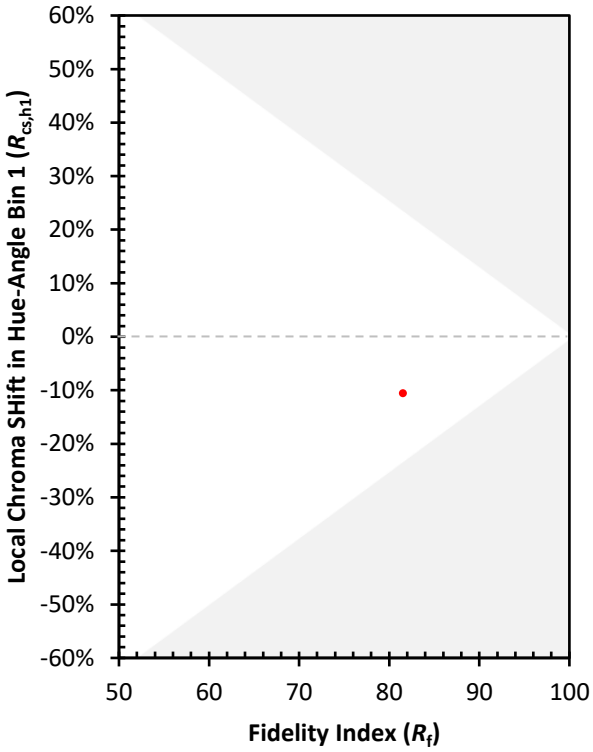


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)