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: P629095

Luminaire Tested: GWS-SA1A-830-U-T3-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:	P629095
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-26)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1A-830-U-T3-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	1658.5 lumens
Efficiency:	N/A
Efficacy:	84.2 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B0 - U0 - G0

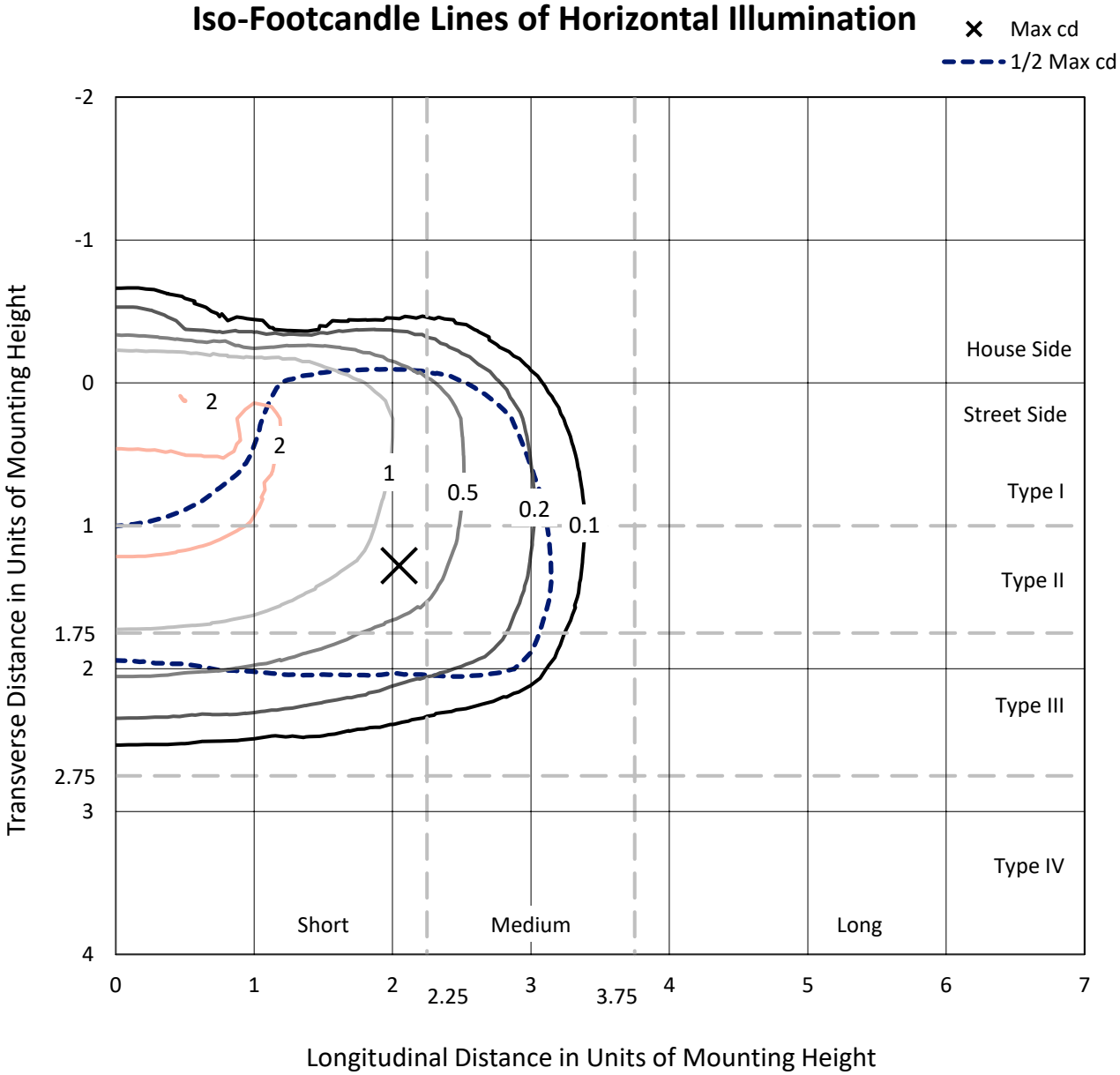
Input Watts (W):	19.7
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P629095
CATALOG NUMBER: GWS-SA1A-830-U-T3-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



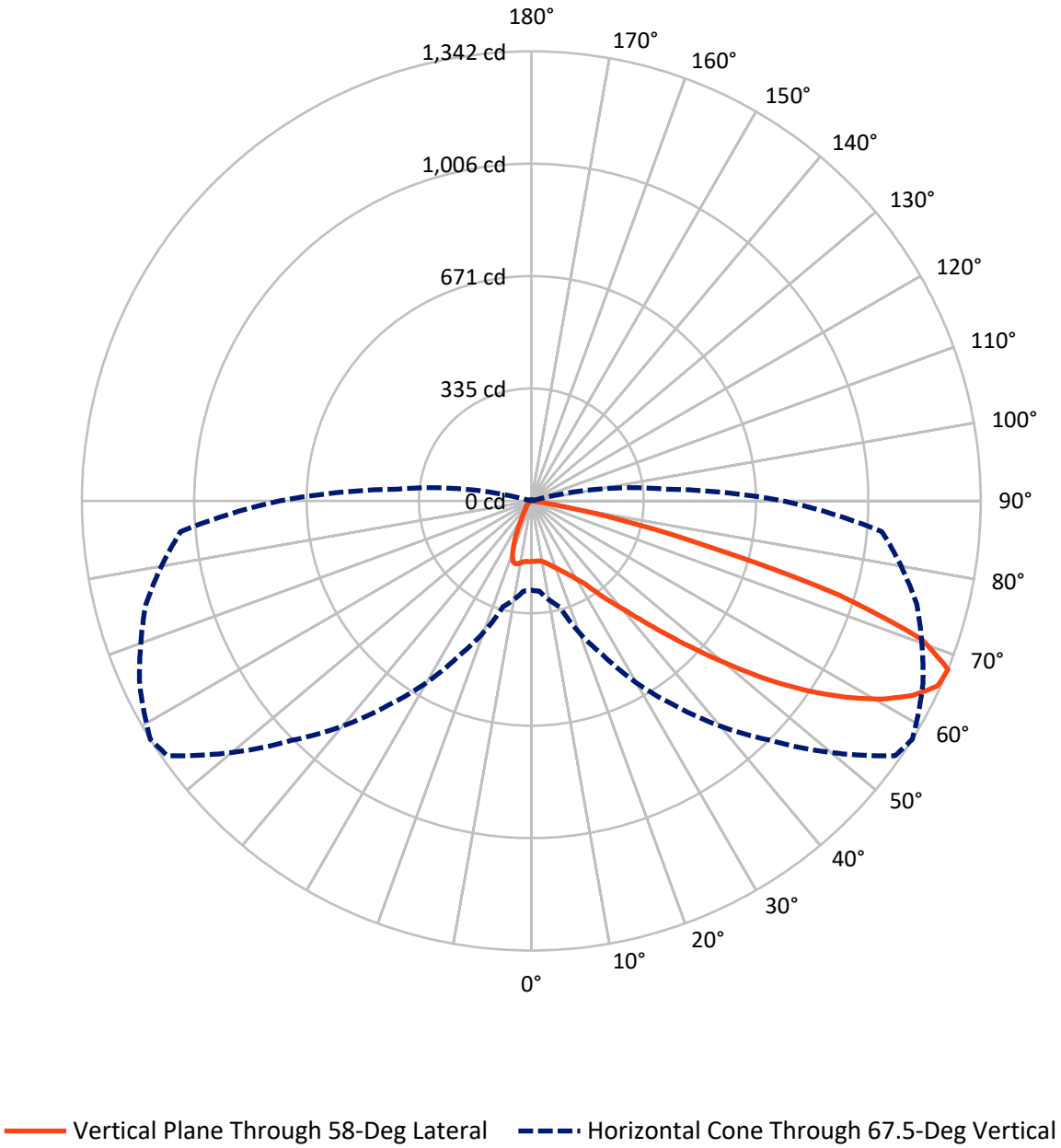
Based on 10 foot mounting height. Maximum calculated value = 2.5 fc
Type III - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P629095
CATALOG NUMBER: GWS-SA1A-830-U-T3-W-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

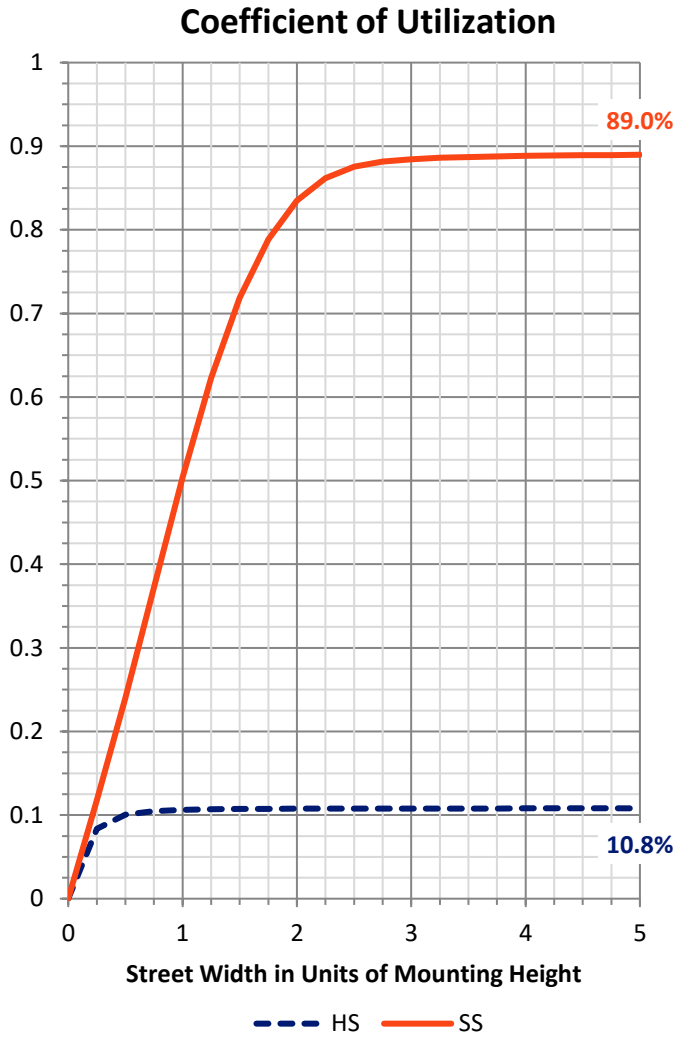
REPORT NUMBER: P629095
CATALOG NUMBER: GWS-SA1A-830-U-T3-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	180.9	0.0	180.9
	% Fixture	10.9	0.0	10.9
Street Side	Lumens	1477.6	0.0	1477.6
	% Fixture	89.1	0.0	89.1
Total	Lumens	1658.5	0.0	1658.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.0	1.0
10°-20°	47.7	2.9
20°-30°	83.2	5.0
30°-40°	148.6	9.0
40°-50°	271.6	16.4
50°-60°	451.7	27.2
60°-70°	490.6	29.6
70°-80°	144.0	8.7
80°-90°	4.1	0.2
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°	1658.5	100.0
0°-180°	1658.5	100.0



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

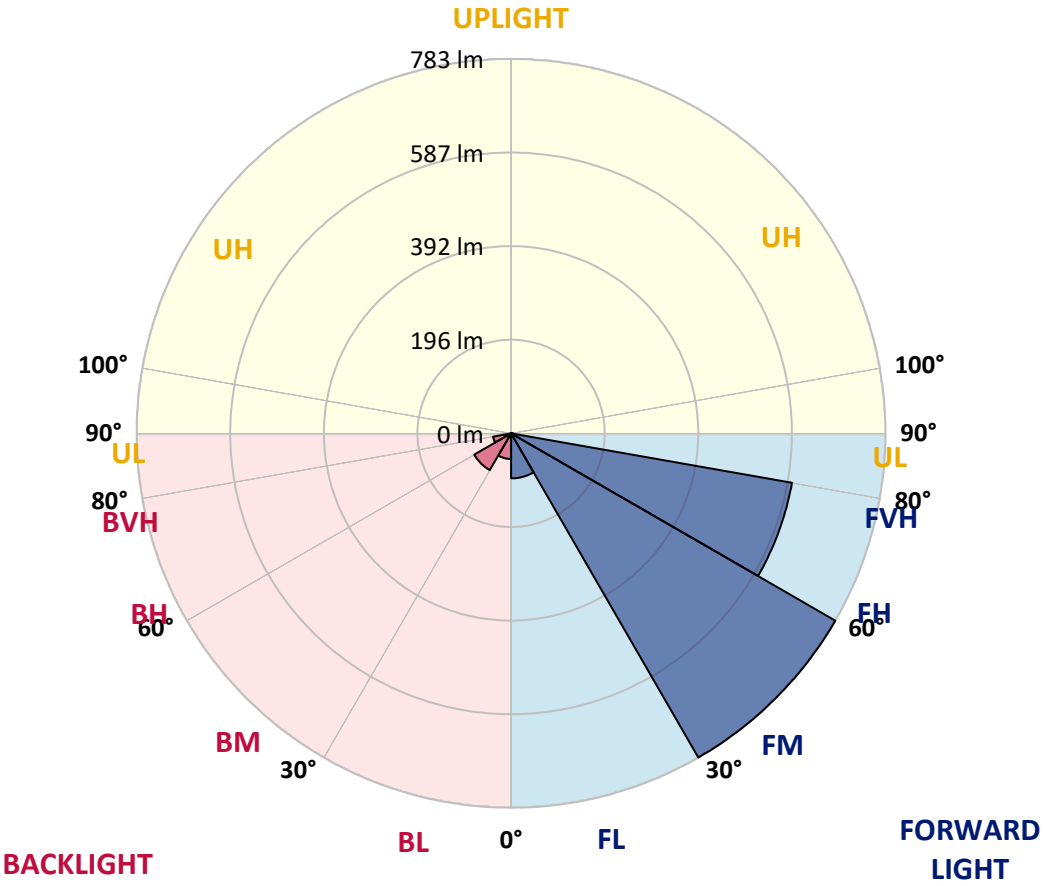
Scaled Data Report

REPORT NUMBER: P629095
CATALOG NUMBER: GWS-SA1A-830-U-T3-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	94.2	5.7			
FM	(30°-60°)	783.0	47.2			
FH	(60°-80°)	596.5	36.0			G0/660
FVH	(80°-90°)	3.9	0.2			G0/10
BL	(0°-30°)	53.7	3.2	B0/110		
BM	(30°-60°)	88.9	5.4	B0/220		
BH	(60°-80°)	38.2	2.3	B0/110		G0/110
BVH	(80°-90°)	0.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G0
Type III Short



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

Scaled Data Report

REPORT NUMBER: P629095
CATALOG NUMBER: GWS-SA1A-830-U-T3-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	180.7	180.7	180.7	180.7	180.7	180.7	180.7	180.7	180.7	180.7	180.7
2.5°	177.3	177.0	177.0	178.3	178.5	179.1	180.6	180.7	181.5	181.2	180.1
5°	168.1	168.3	169.2	171.5	173.4	175.9	179.4	180.2	182.0	183.0	182.3
7.5°	159.5	159.7	161.1	164.7	168.4	173.3	179.1	180.7	184.3	186.9	187.0
10°	156.3	156.1	157.6	161.6	166.5	173.3	181.7	183.8	189.1	193.7	194.5
12.5°	157.2	157.1	158.5	162.3	167.6	176.2	186.2	189.1	195.9	202.9	204.4
15°	161.1	161.0	161.9	165.0	170.8	179.8	192.1	196.4	205.0	213.4	215.7
17.5°	172.8	172.0	171.0	171.3	174.7	184.0	199.5	204.9	215.5	225.6	227.5
20°	193.5	191.4	188.8	185.4	183.8	190.1	208.1	214.2	227.2	238.7	239.0
22.5°	224.8	224.0	218.0	208.1	201.1	201.3	218.1	225.3	241.1	253.8	252.0
25°	268.3	267.9	258.6	242.4	224.3	218.1	230.9	238.2	257.6	271.1	265.4
27.5°	322.4	319.0	308.2	286.3	259.3	240.0	247.1	253.6	275.1	287.8	277.1
30°	369.6	369.7	359.5	336.7	306.2	272.9	266.9	272.5	291.2	304.5	291.5
32.5°	414.9	416.4	405.2	384.6	351.3	315.8	295.2	296.2	311.7	326.2	310.4
35°	457.0	458.1	450.4	432.9	401.8	360.6	334.7	334.2	342.7	357.4	336.8
37.5°	504.1	505.3	497.6	481.9	452.8	412.0	379.6	378.9	382.3	394.3	370.8
40°	554.3	556.4	548.0	534.7	506.9	472.4	431.7	425.9	422.5	436.6	414.9
42.5°	605.2	608.4	605.5	592.2	568.4	539.9	499.4	490.4	483.1	500.7	477.7
45°	668.3	672.2	670.9	660.7	642.3	619.1	580.9	570.4	567.0	583.3	555.9
47.5°	729.1	733.3	738.0	735.7	722.6	711.9	669.5	663.5	662.5	680.0	637.6
50°	774.2	778.1	796.1	809.1	818.0	815.7	778.9	770.0	768.6	779.7	723.7
52.5°	806.6	810.4	835.1	875.6	908.3	926.1	889.1	887.1	879.2	875.3	804.4
55°	831.7	836.9	863.0	924.2	990.1	1029.6	1006.5	999.5	979.1	956.8	879.2
57.5°	836.8	838.9	875.6	958.2	1053.6	1117.6	1117.6	1105.4	1066.1	1035.1	965.7
60°	791.7	798.2	847.9	955.5	1080.8	1175.0	1209.7	1201.3	1148.2	1110.1	1048.9
62.5°	691.8	699.1	759.7	889.5	1053.6	1186.9	1279.5	1278.2	1218.3	1172.1	1117.9
65°	530.5	535.9	588.7	744.1	938.6	1141.4	1329.4	1332.9	1273.7	1213.1	1141.7
67.5°	266.6	270.3	327.3	508.3	744.0	1010.4	1326.0	1341.8	1290.5	1191.4	1050.8
70°	93.1	96.8	123.7	218.1	452.8	771.5	1211.3	1237.2	1191.6	1017.0	775.2
72.5°	31.9	33.7	51.3	81.0	176.2	457.3	921.1	960.2	878.4	682.7	445.5
75°	18.1	19.3	27.5	43.9	73.8	150.4	522.6	546.6	512.1	372.1	183.3
77.5°	12.3	13.3	17.2	24.9	40.8	48.4	213.1	268.3	234.0	121.5	46.8
80°	7.3	7.9	10.5	14.7	20.9	18.8	45.7	60.7	78.2	36.3	14.1
82.5°	3.4	3.9	6.8	9.7	10.5	7.9	13.4	16.4	22.0	17.8	5.8
85°	0.0	0.0	2.3	4.0	3.9	2.3	3.7	4.0	6.0	8.9	2.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.5	1.0	1.8	1.0
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: P629095
CATALOG NUMBER: GWS-SA1A-830-U-T3-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	180.7	180.7	180.7	180.7	180.7	180.7	180.7	180.7	180.7	180.7	180.7
2.5°	181.4	180.2	181.5	180.9	181.5	181.4	180.1	179.3	179.3	177.8	177.3
5°	183.6	182.5	182.8	181.4	181.1	180.2	178.6	178.0	178.0	176.5	176.0
7.5°	188.7	186.9	186.6	183.6	182.3	180.1	177.2	176.0	175.9	174.4	173.9
10°	196.6	194.5	193.0	189.3	185.6	181.1	174.9	169.7	166.8	162.9	162.6
12.5°	206.3	203.7	201.5	195.8	189.6	179.4	161.3	142.3	130.7	121.5	122.1
15°	217.2	214.7	211.2	202.6	190.0	163.4	125.5	96.4	82.1	74.5	74.2
17.5°	229.0	225.4	219.6	207.9	179.8	124.9	81.6	57.7	50.2	47.6	47.0
20°	240.0	235.6	228.3	209.1	150.3	84.5	51.0	44.7	43.4	42.6	42.6
22.5°	251.7	246.2	235.3	200.3	111.7	54.1	43.4	41.9	41.0	39.8	39.7
25°	263.5	256.4	241.6	177.5	73.2	42.6	40.6	39.0	37.2	35.5	35.0
27.5°	273.5	264.3	246.5	143.5	47.0	38.4	37.1	34.3	31.9	30.0	29.6
30°	285.5	273.7	248.6	104.9	36.9	33.8	31.9	29.0	26.1	24.1	23.5
32.5°	301.5	288.6	245.3	68.3	32.7	29.8	26.7	23.3	20.4	18.3	18.0
35°	326.5	311.1	230.4	43.6	29.6	25.7	22.0	18.5	16.0	14.4	14.1
37.5°	356.9	342.7	206.0	32.7	26.6	22.3	18.0	14.6	12.8	11.7	11.3
40°	402.1	382.2	175.7	28.7	23.5	18.9	14.7	12.0	10.7	9.7	9.4
42.5°	460.7	428.8	140.9	26.1	20.6	15.9	12.0	9.9	8.7	8.1	7.9
45°	529.2	474.3	104.1	23.5	17.8	13.1	9.9	8.1	7.3	6.8	6.6
47.5°	599.3	514.2	71.9	20.7	15.2	10.9	8.3	7.0	6.3	5.7	5.5
50°	674.2	547.8	49.1	18.0	13.0	8.9	7.1	6.3	5.5	5.0	4.9
52.5°	729.1	560.3	34.2	15.5	11.0	7.6	6.3	5.7	5.0	4.4	4.2
55°	779.7	560.0	25.9	13.1	9.4	6.6	5.7	5.0	4.4	3.9	3.7
57.5°	830.3	555.6	20.4	11.2	8.1	6.0	5.0	4.4	4.0	3.4	3.2
60°	863.0	539.1	15.9	9.4	7.0	5.2	4.4	3.9	3.4	2.9	2.8
62.5°	880.3	516.1	12.1	7.4	5.7	4.5	3.9	3.4	2.9	2.4	2.3
65°	856.8	475.3	9.6	5.8	4.4	3.9	3.2	2.8	2.3	1.8	1.6
67.5°	*752.7*	*400.8*	*7.4*	*4.7*	*3.4*	*2.9*	*2.8*	*2.3*	*1.6*	*1.3*	*1.1*
70°	532.0	274.5	5.8	3.6	2.6	2.3	2.1	1.8	1.3	1.0	0.8
72.5°	292.0	138.5	4.2	2.6	1.9	1.8	1.6	1.5	1.1	0.8	0.8
75°	112.4	38.1	3.1	1.8	1.3	1.3	1.1	1.1	1.0	0.6	0.6
77.5°	29.3	11.3	1.9	1.1	0.8	0.8	0.8	0.6	0.6	0.5	0.5
80°	9.4	3.7	1.1	0.8	0.6	0.5	0.5	0.3	0.5	0.3	0.3
82.5°	3.1	1.3	0.6	0.6	0.5	0.3	0.3	0.2	0.2	0.0	0.0
85°	1.1	0.6	0.5	0.3	0.3	0.3	0.2	0.0	0.0	0.0	0.0
87.5°	0.6	0.3	0.3	0.3	0.3	0.2	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

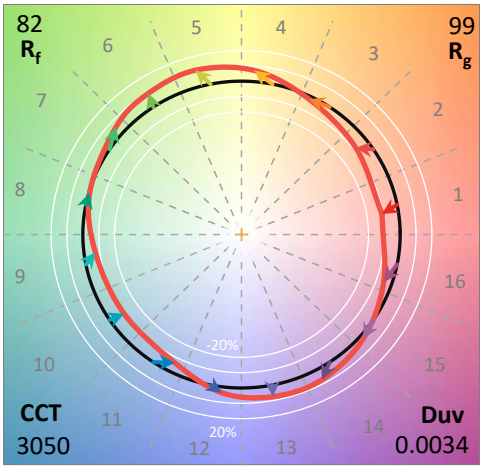
Test Information

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

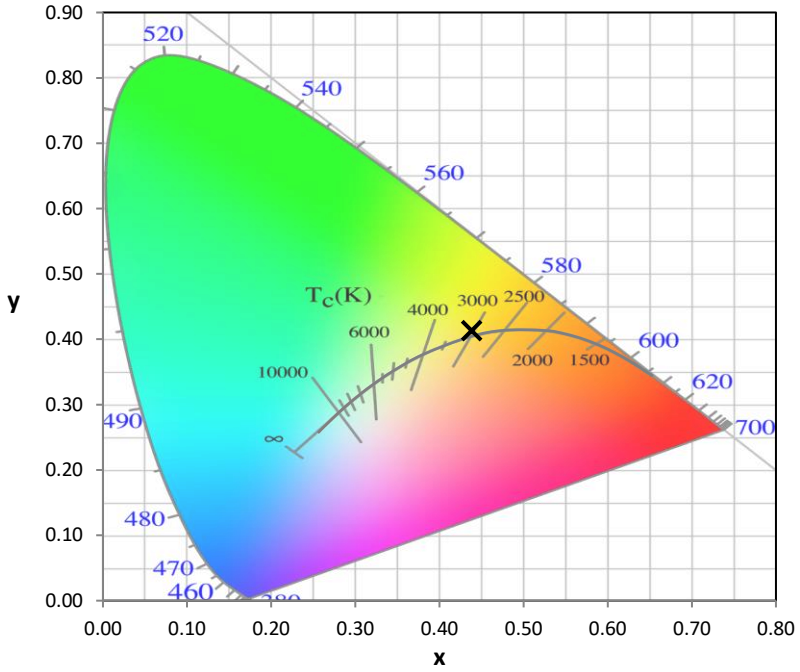
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

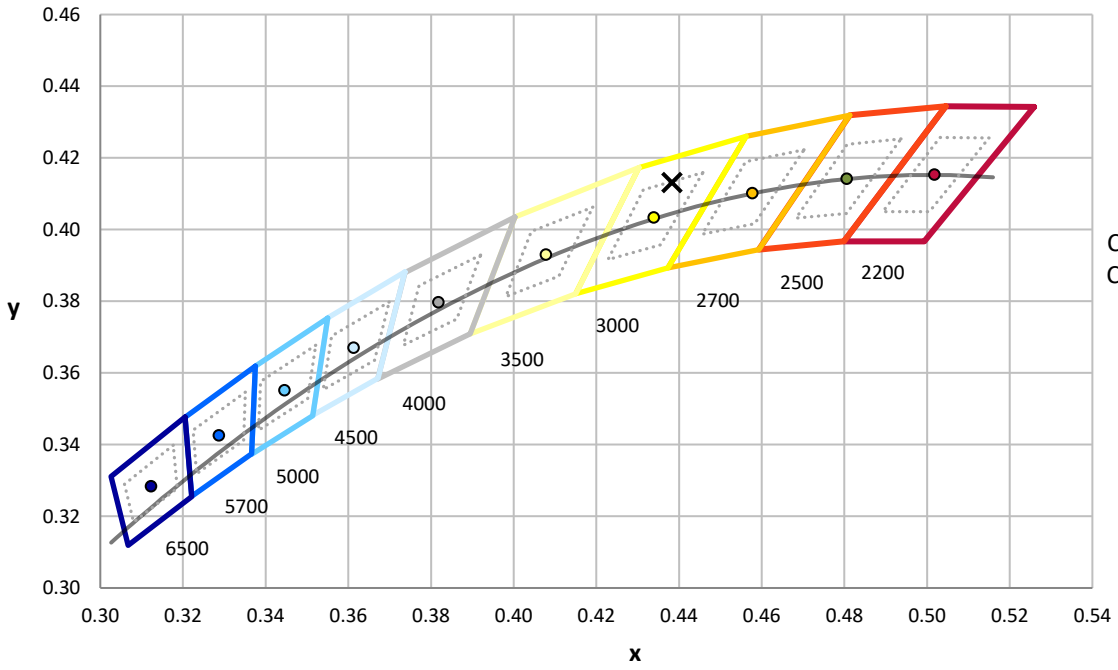
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

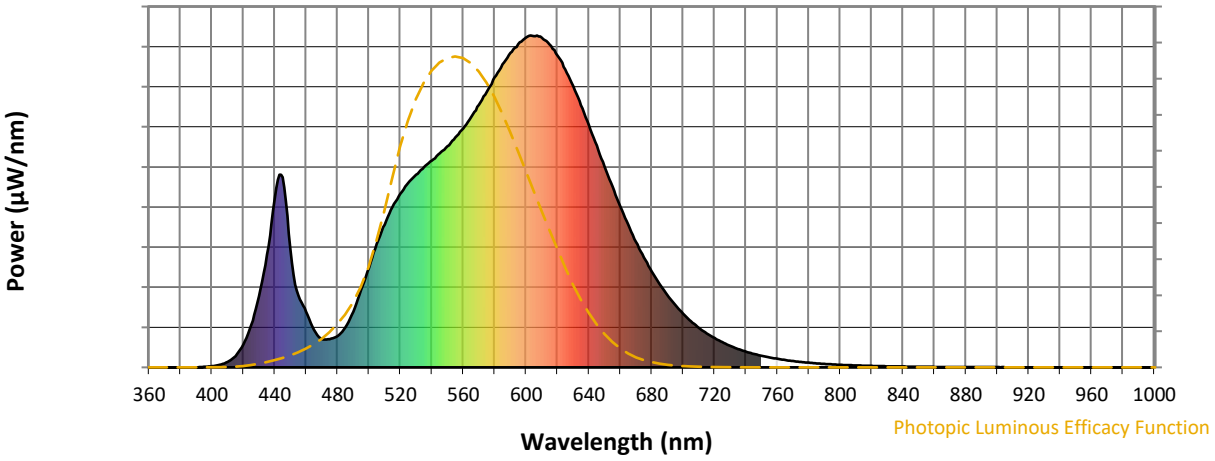


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

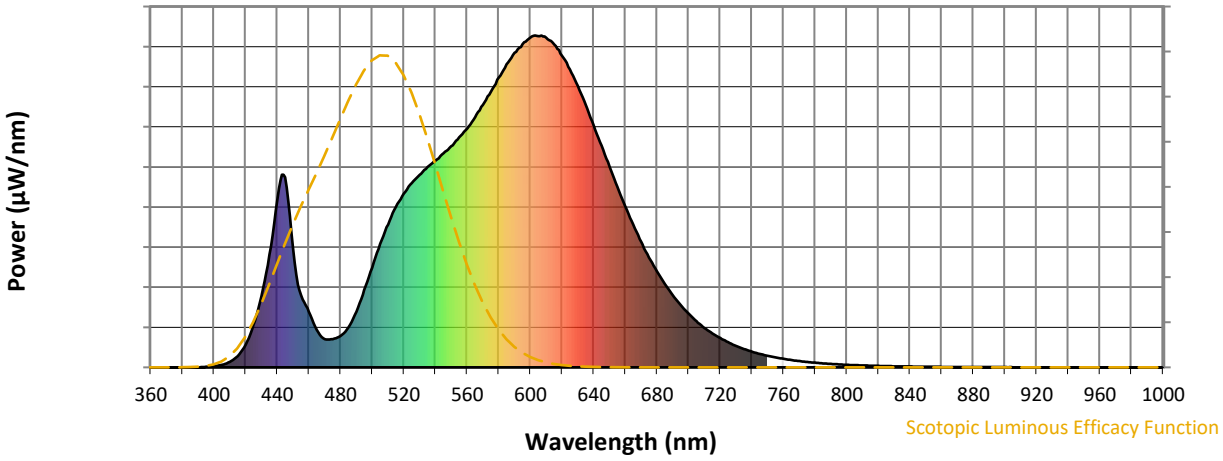


Photopic Lumens: NR

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

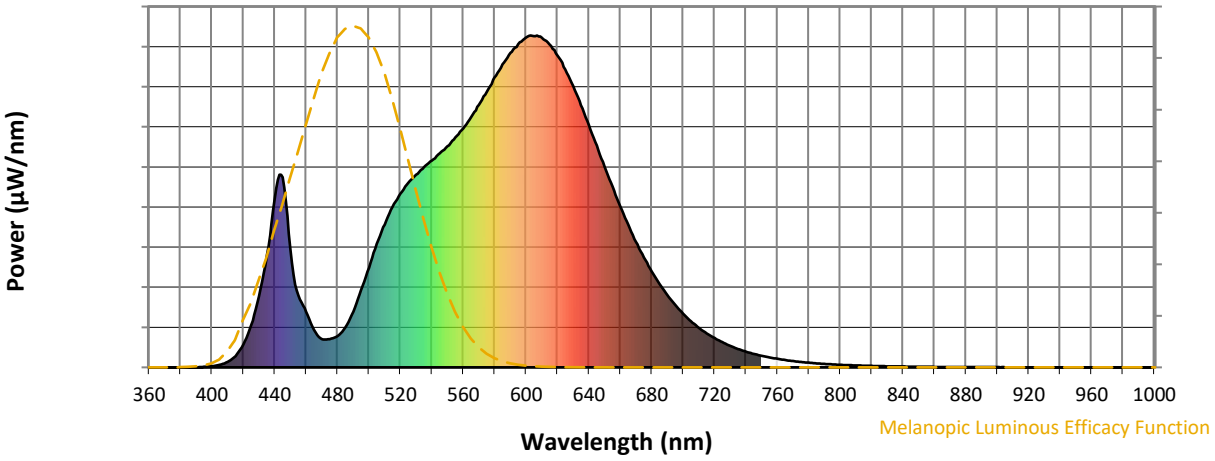


Scotopic Lumens: NR **S/P: 1.27**

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			

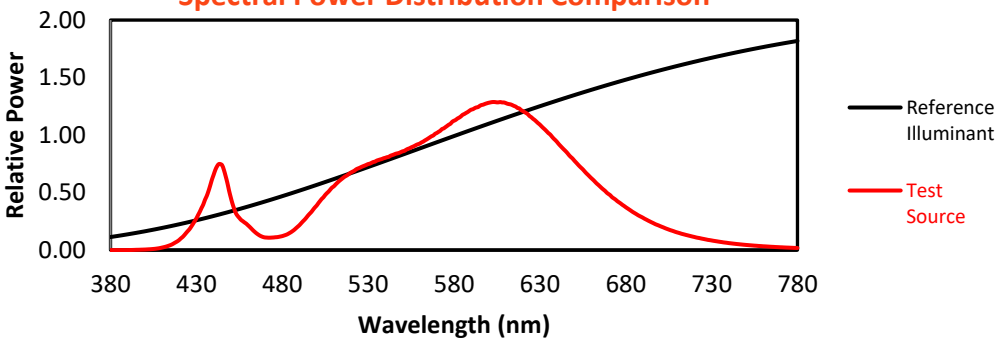
REPORT NUMBER: SP1-2408-195-9

TM-30-18

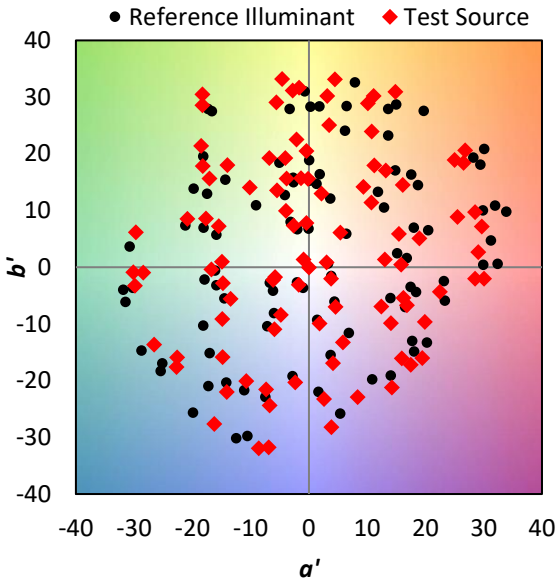
Summary

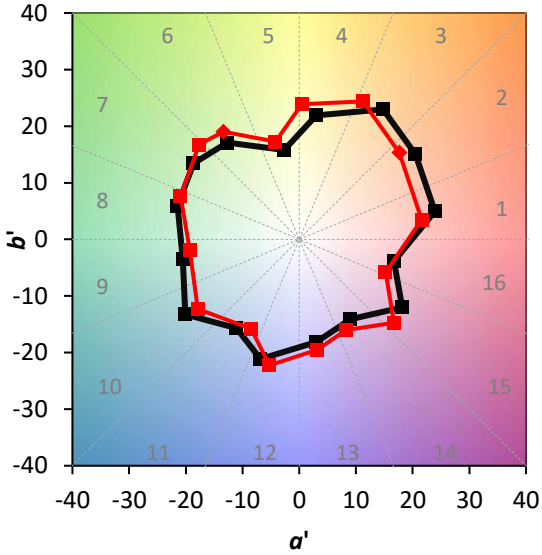
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

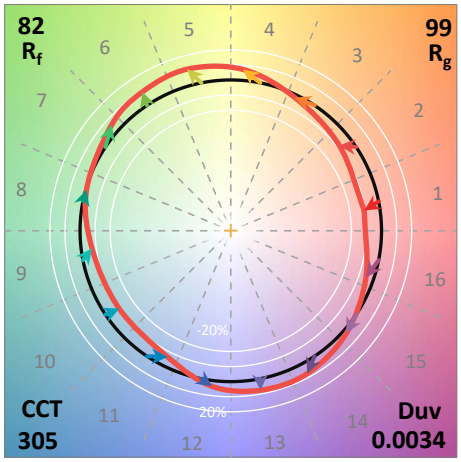
Spectral Power Distribution Comparison

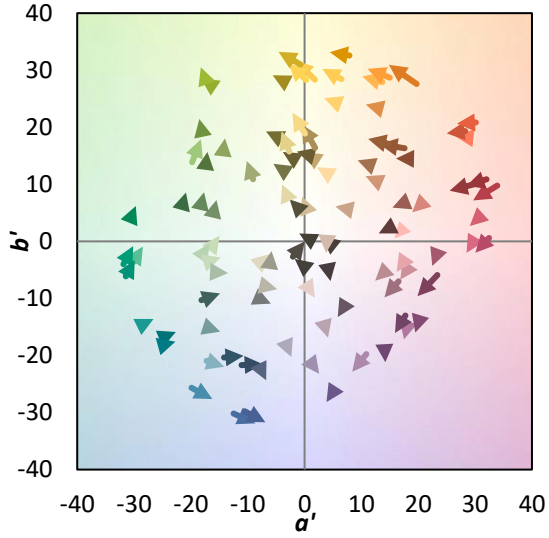


Color Vector Graphics







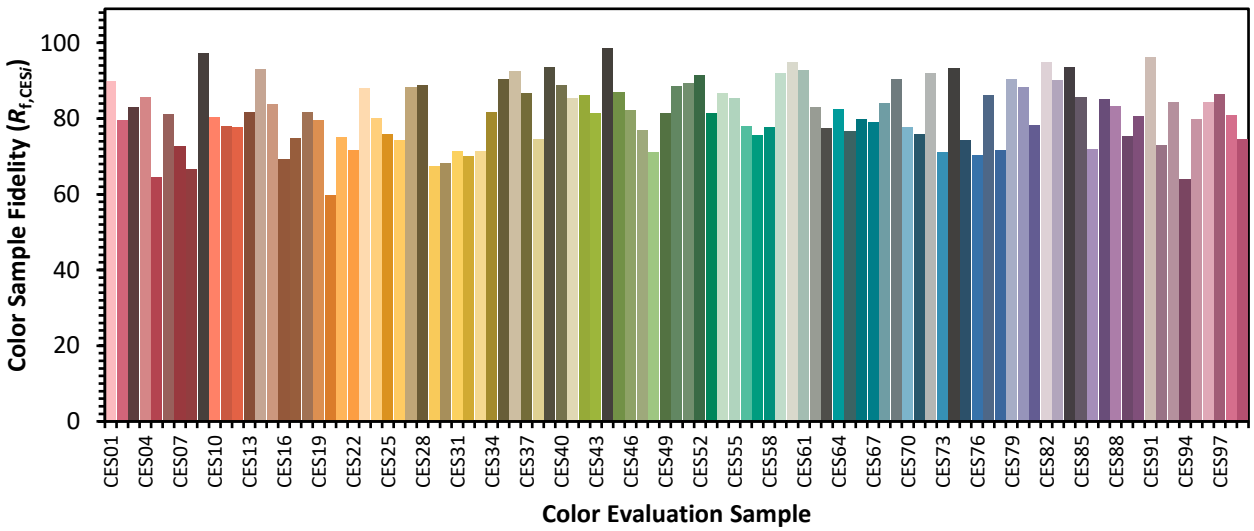


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

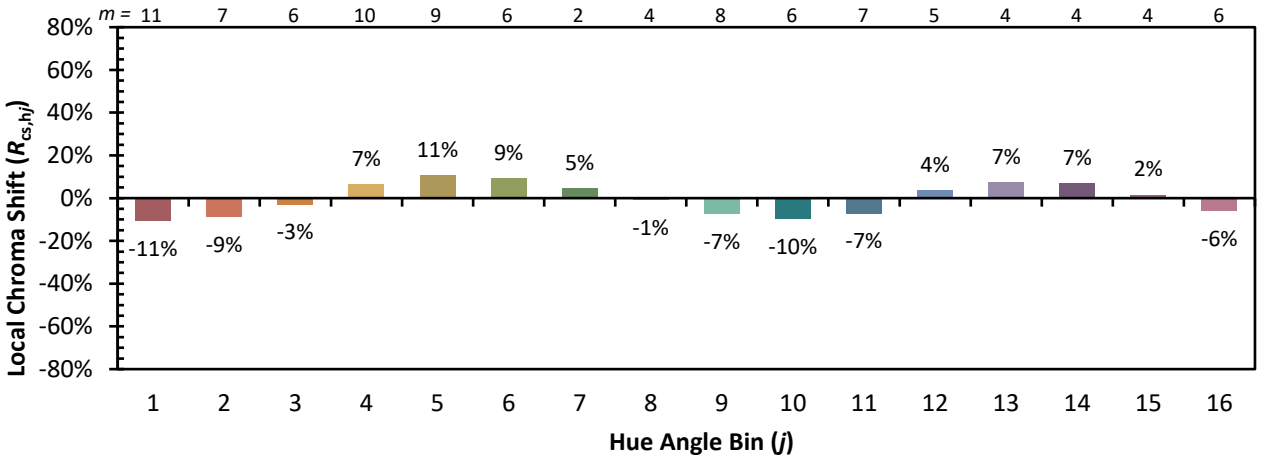
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

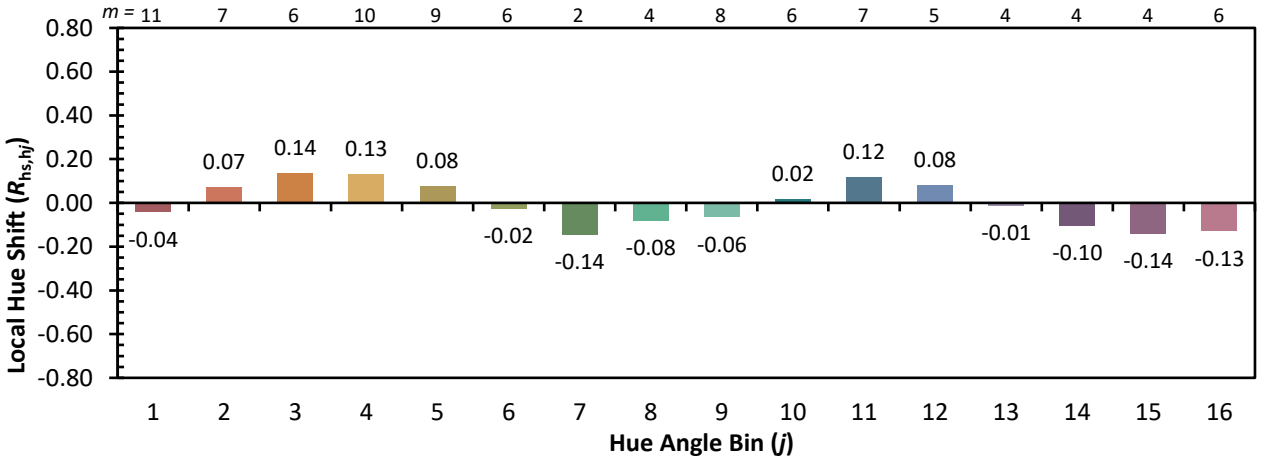


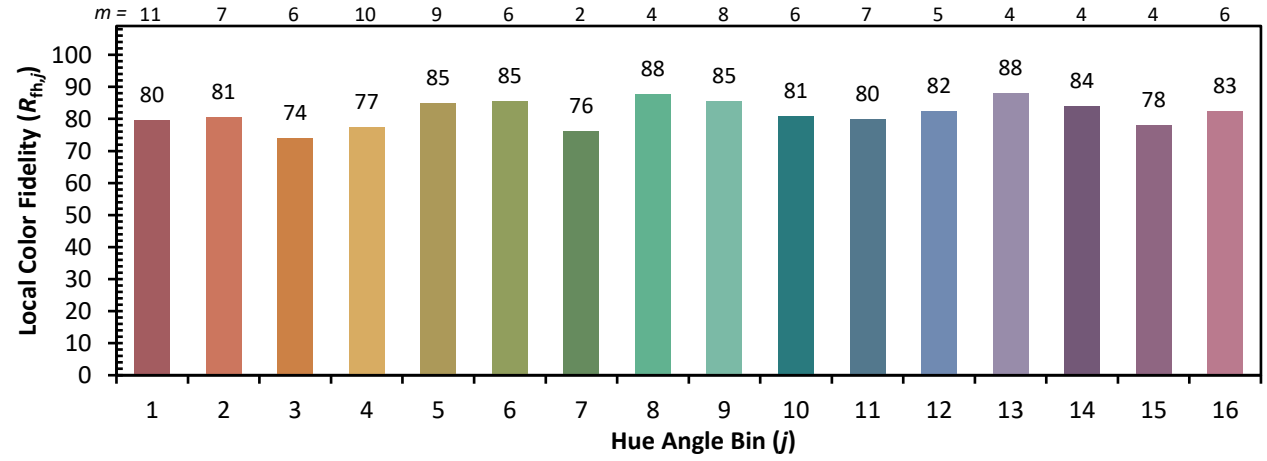
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



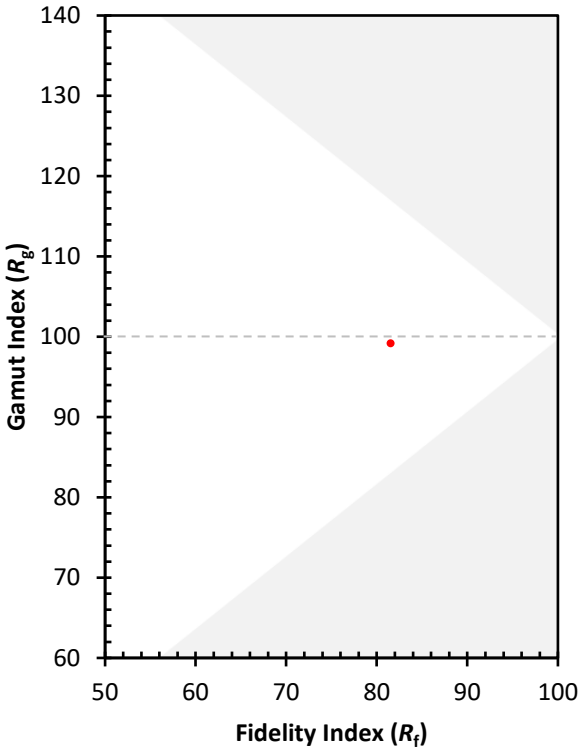


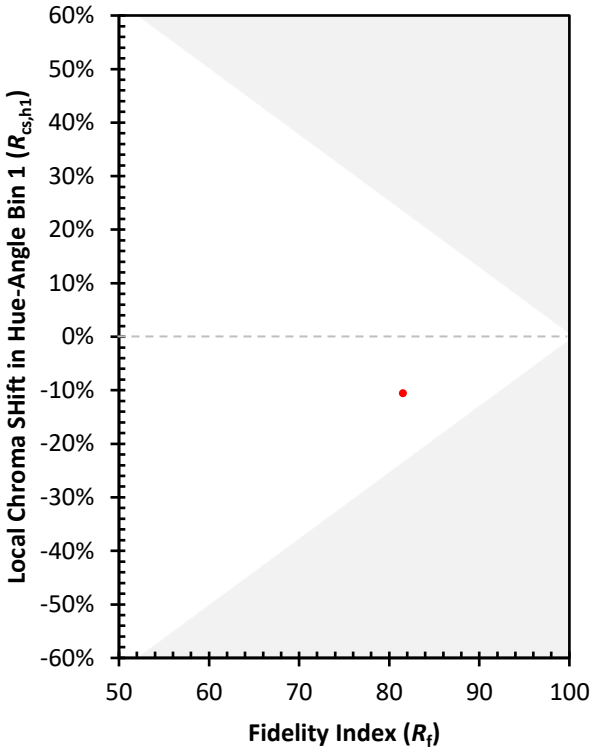


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)