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: P629063

Luminaire Tested: GWS-SA1A-830-U-RW-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:	P629063
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-50)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1A-830-U-RW-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE 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:	1464.1 lumens
Efficiency:	N/A
Efficacy:	74.3 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type V - Short
BUG Rating:	B1 - U0 - G0

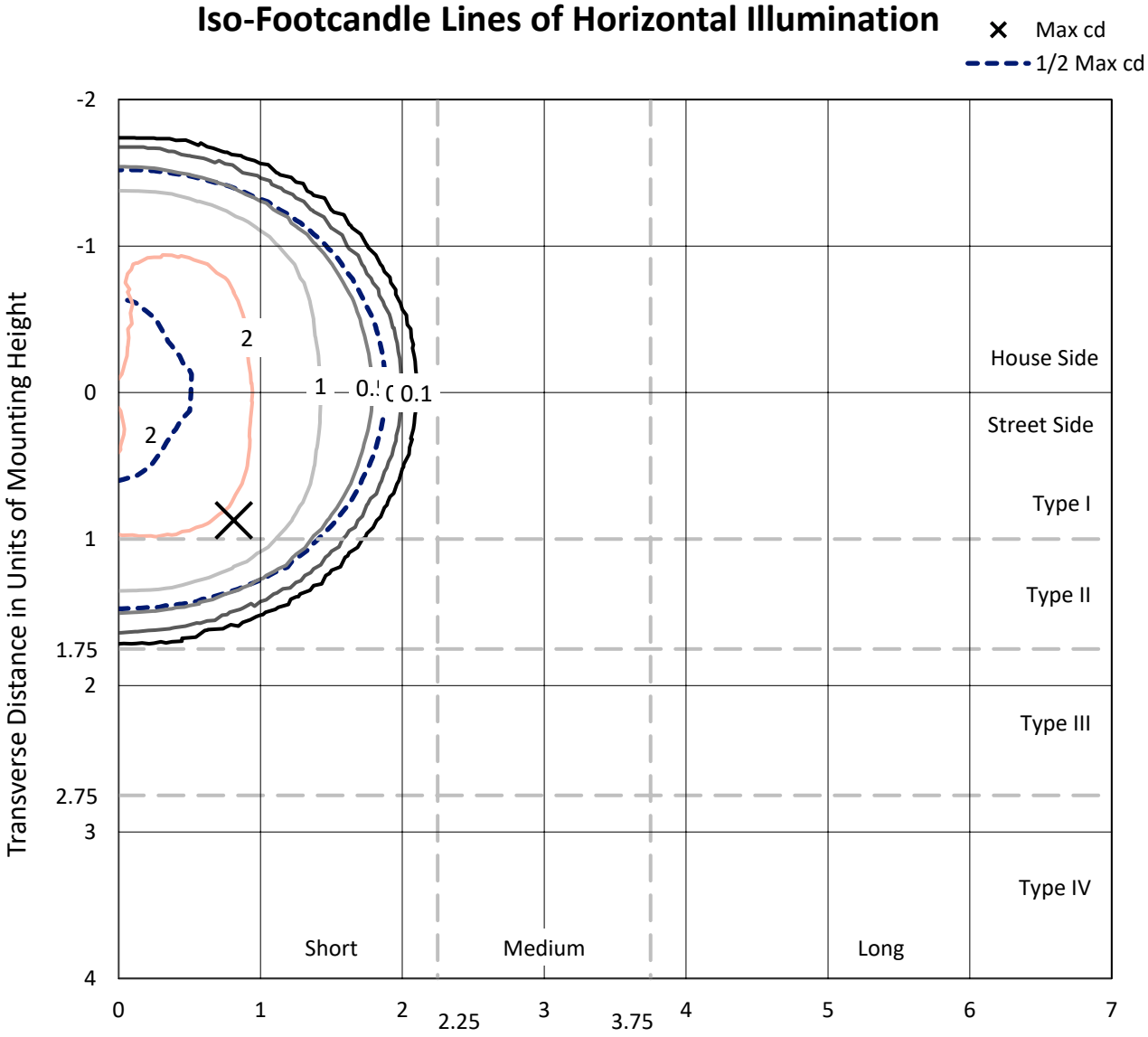
Input Watts (W):	19.7
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P629063
CATALOG NUMBER: GWS-SA1A-830-U-RW-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



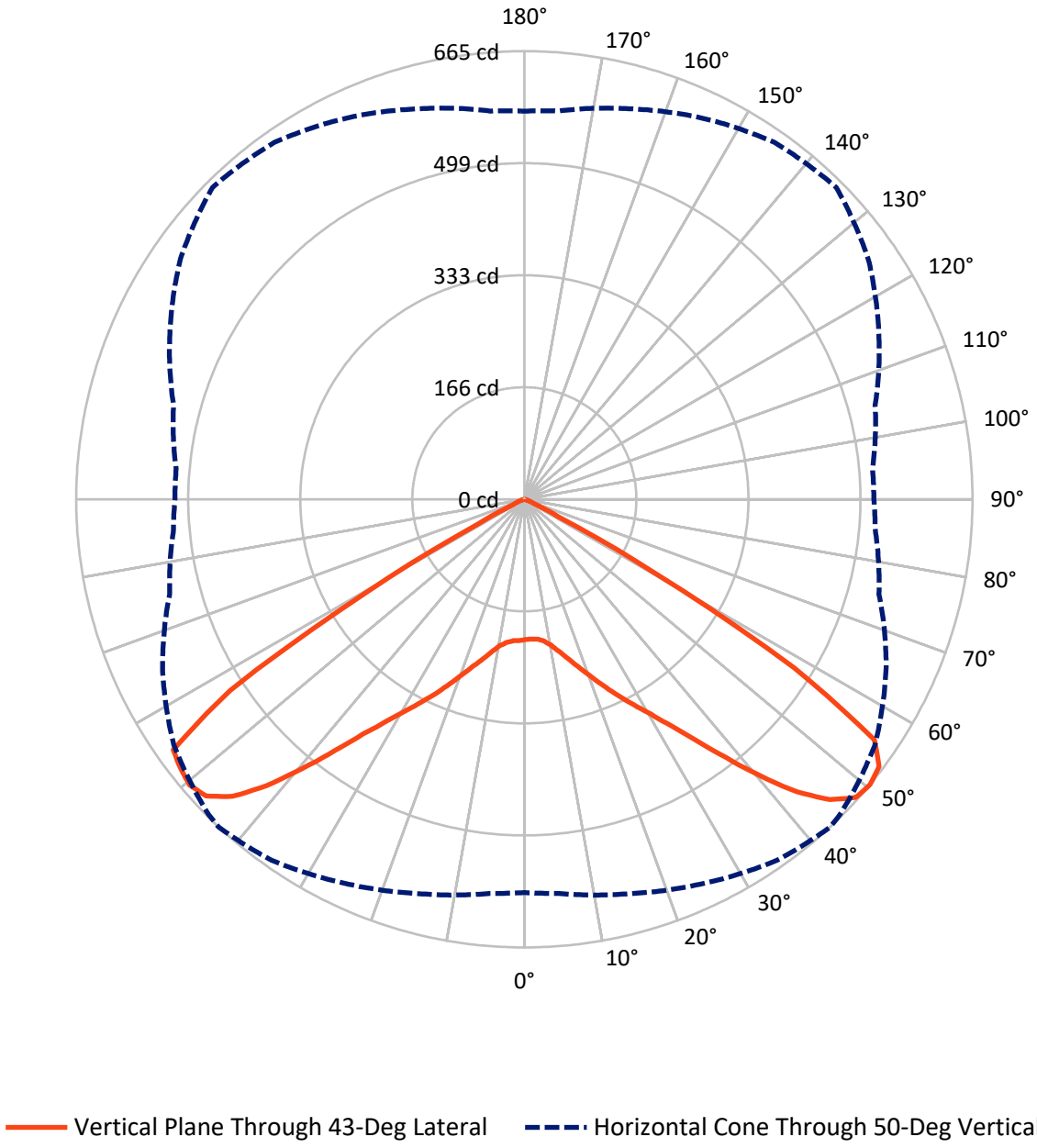
Based on 10 foot mounting height. Maximum calculated value = 2.5 fc
Type V - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P629063
CATALOG NUMBER: GWS-SA1A-830-U-RW-W-GRSBK

Luminous Intensity Polar Plot



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

Scaled Data Report

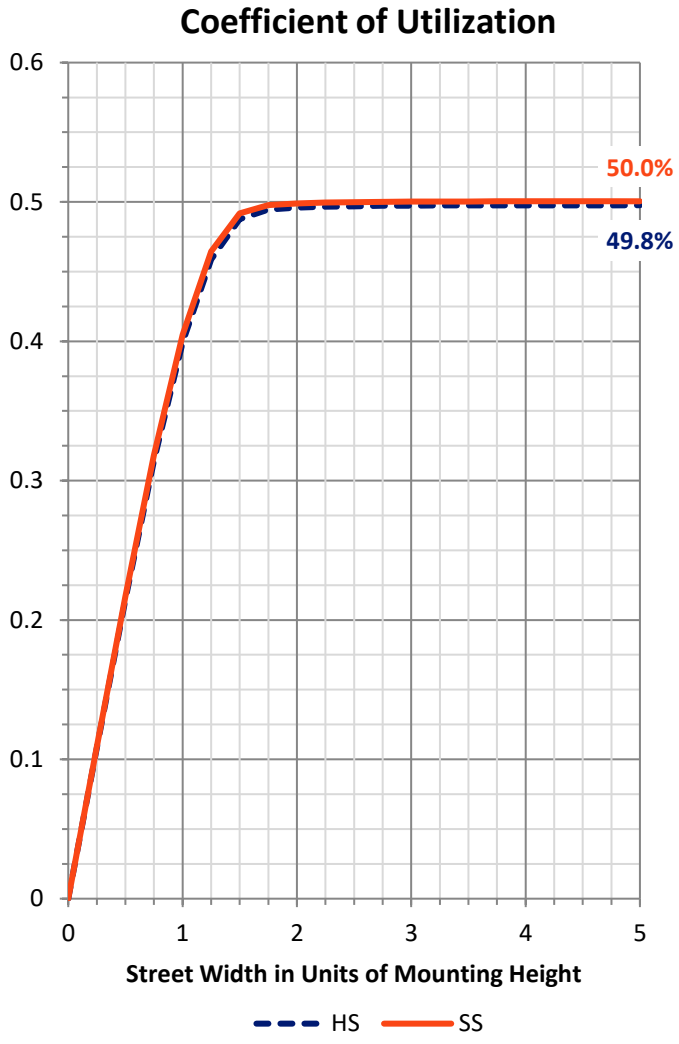
REPORT NUMBER: P629063
CATALOG NUMBER: GWS-SA1A-830-U-RW-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	732.0	0.0	732.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	732.1	0.0	732.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	1464.1	0.0	1464.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.5	1.4
10°-20°	70.6	4.8
20°-30°	142.8	9.8
30°-40°	264.9	18.1
40°-50°	439.7	30.0
50°-60°	448.8	30.7
60°-70°	73.6	5.0
70°-80°	3.2	0.2
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°	1464.1	100.0
0°-180°	1464.1	100.0



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

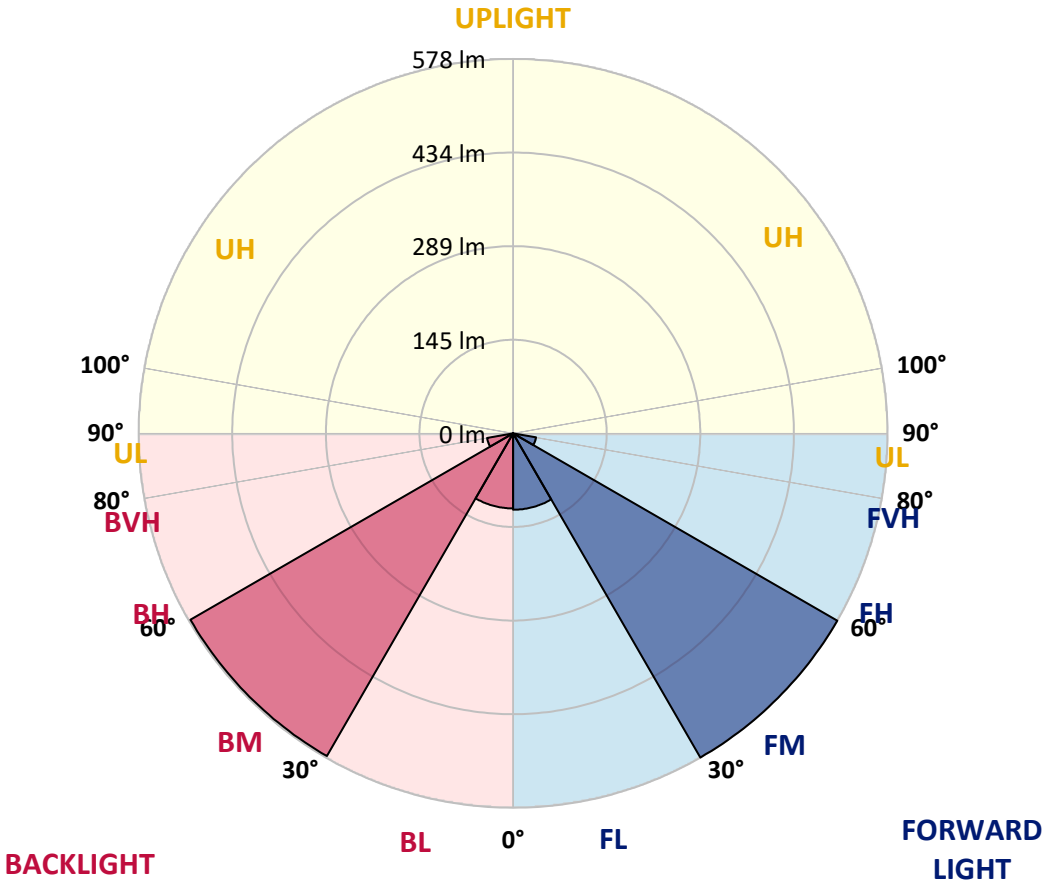
Scaled Data Report

REPORT NUMBER: P629063
CATALOG NUMBER: GWS-SA1A-830-U-RW-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	118.0	8.1			
FM	(30°-60°)	578.1	39.5			
FH	(60°-80°)	36.0	2.5			G0/660
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	115.9	7.9	B1/500		
BM	(30°-60°)	575.3	39.3	B1/1000		
BH	(60°-80°)	40.8	2.8	B0/110		G0/660
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 V Short



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

Scaled Data Report

REPORT NUMBER: P629063
CATALOG NUMBER: GWS-SA1A-830-U-RW-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2
2.5°	204.4	204.8	205.5	206.1	206.9	207.8	208.2	209.7	209.4	210.7	210.7
5°	202.1	202.6	203.4	204.8	206.6	208.4	209.7	212.6	214.2	216.8	217.8
7.5°	203.2	203.9	204.8	207.1	209.9	212.6	214.1	218.8	222.0	226.9	229.6
10°	206.9	207.6	209.2	213.1	216.7	220.6	222.3	228.3	233.5	240.1	244.0
12.5°	211.2	212.0	215.2	221.0	227.2	232.4	234.8	241.4	246.8	254.2	260.4
15°	215.5	216.8	221.8	230.4	239.2	246.1	248.7	255.9	261.2	269.1	276.1
17.5°	225.7	227.2	232.9	242.1	254.1	262.2	264.4	271.9	275.9	281.3	288.6
20°	238.5	241.3	248.2	259.4	272.5	280.3	281.9	289.2	288.9	291.2	297.5
22.5°	254.4	256.3	263.9	277.2	292.0	300.5	304.3	307.3	303.3	301.4	305.4
25°	270.9	273.2	281.4	296.0	312.5	322.4	325.5	327.9	321.4	314.1	314.6
27.5°	292.3	293.9	302.0	317.5	334.1	345.2	348.0	352.2	343.6	332.0	328.7
30°	317.7	319.3	327.9	344.3	360.6	370.2	374.4	379.6	370.2	355.6	351.9
32.5°	347.5	349.1	360.1	377.0	390.4	400.8	404.8	410.3	402.9	386.5	382.3
35°	383.1	384.1	397.1	415.4	429.6	439.6	442.4	448.9	440.6	424.3	422.0
37.5°	424.4	425.6	439.6	460.9	475.4	486.6	491.0	492.8	482.7	464.4	462.6
40°	469.8	473.5	487.3	510.1	526.4	540.5	544.4	538.4	524.3	499.4	496.2
42.5°	517.1	520.3	535.7	560.4	579.4	593.8	594.0	581.0	557.0	522.6	517.7
45°	556.4	557.7	577.6	602.6	625.9	636.1	637.0	613.6	577.5	536.0	525.6
47.5°	583.4	585.5	602.9	626.8	652.6	661.8	659.9	630.6	587.2	544.7	527.6
50°	583.8	587.3	606.1	629.3	654.2	665.4	662.6	635.4	592.7	545.1	522.9
52.5°	532.1	537.9	568.5	602.1	640.3	659.4	660.0	641.7	590.6	539.9	518.7
55°	401.4	407.7	446.3	503.4	577.3	630.6	639.8	634.3	588.1	542.1	526.1
57.5°	212.5	207.6	229.0	285.6	378.4	472.7	499.7	543.8	561.1	544.9	539.9
60°	46.3	49.4	65.7	88.6	147.7	222.3	248.7	324.2	413.9	453.7	482.6
62.5°	19.9	19.6	20.4	23.2	33.8	56.4	68.8	112.4	177.3	243.5	288.4
65°	16.4	16.5	17.2	17.2	16.0	16.2	17.0	25.7	41.5	58.1	78.1
67.5°	12.3	12.5	13.6	13.9	13.1	11.7	11.5	9.7	10.2	12.8	13.3
70°	7.8	7.8	8.4	8.7	8.7	8.1	7.9	7.0	6.8	7.8	8.7
72.5°	4.2	4.2	4.5	4.7	4.5	4.4	4.4	4.2	4.0	4.7	6.0
75°	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	2.1	3.2
77.5°	0.3	0.5	0.6	0.5	0.3	0.3	0.3	0.5	0.5	0.6	1.0
80°	0.2	0.2	0.3	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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: P629063
CATALOG NUMBER: GWS-SA1A-830-U-RW-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2
2.5°	211.8	210.0	210.7	211.0	210.5	210.2	208.4	207.9	207.1	205.8	205.5
5°	218.9	217.5	217.3	216.3	214.1	211.3	207.9	206.5	204.8	203.2	202.9
7.5°	230.9	229.1	228.0	224.8	219.6	215.2	209.5	206.5	204.4	202.3	201.8
10°	246.3	244.2	241.0	235.0	228.0	221.7	215.0	211.0	207.8	204.8	204.7
12.5°	262.7	260.4	254.6	246.9	238.5	232.7	224.3	218.6	213.8	209.4	208.9
15°	279.8	277.1	269.1	260.1	252.3	246.3	237.1	228.0	220.6	214.2	213.6
17.5°	292.9	289.5	280.1	273.3	267.0	260.9	250.5	238.5	228.6	221.0	219.3
20°	301.2	298.0	289.0	285.3	282.4	278.0	265.7	253.3	242.3	232.9	231.2
22.5°	309.1	305.2	297.5	297.5	299.7	298.0	284.7	270.4	257.5	246.6	244.2
25°	318.0	315.0	309.5	314.0	319.7	319.5	305.9	288.1	273.2	261.0	258.6
27.5°	331.0	327.9	326.0	334.6	341.7	341.2	326.3	307.0	291.3	279.3	277.1
30°	353.8	350.9	348.8	359.2	368.2	364.8	348.5	329.9	314.0	300.4	298.8
32.5°	384.3	381.2	378.4	388.8	396.9	392.5	377.0	359.5	341.2	327.9	324.7
35°	424.3	417.8	415.0	427.3	430.7	425.9	411.0	395.6	376.2	360.9	358.8
37.5°	465.6	457.9	456.0	466.7	472.2	470.4	452.9	436.9	415.8	399.0	396.6
40°	500.9	493.9	490.5	507.2	519.6	520.8	505.1	485.5	460.7	443.2	438.8
42.5°	521.6	515.6	514.8	540.7	561.1	575.7	556.9	536.6	510.6	490.8	487.3
45°	526.3	522.4	529.2	563.2	594.9	621.5	605.5	584.1	555.9	535.0	531.6
47.5°	525.8	524.5	536.6	574.9	615.0	647.7	639.8	615.7	588.5	566.6	563.4
50°	*518.8*	*519.0*	*539.2*	*580.7*	*623.1*	*654.9*	*646.9*	*624.6*	*600.3*	*578.7*	*576.2*
52.5°	516.1	515.1	534.4	578.9	631.4	651.6	633.8	608.7	581.7	555.1	551.2
55°	525.8	523.4	535.0	577.5	632.3	649.8	602.9	548.5	493.1	461.7	459.1
57.5°	540.4	537.8	543.3	566.8	581.7	540.4	443.7	355.9	298.9	274.8	264.3
60°	482.6	480.8	476.6	448.2	384.4	290.0	197.6	126.0	90.5	73.2	73.2
62.5°	299.4	297.0	274.2	203.7	148.0	85.7	47.1	29.5	22.3	20.9	20.7
65°	84.0	83.6	69.1	48.9	31.1	19.3	17.0	17.3	17.0	16.5	16.4
67.5°	12.6	13.9	13.9	11.3	10.8	12.1	14.3	15.2	14.4	13.6	13.3
70°	8.1	8.7	8.4	7.3	7.8	9.1	10.2	10.4	9.9	9.1	8.9
72.5°	5.7	6.3	5.2	4.7	4.9	5.3	5.8	5.8	5.7	5.3	5.0
75°	3.4	3.4	2.4	2.3	2.3	2.4	2.4	2.8	2.8	2.6	2.4
77.5°	1.1	1.3	0.8	0.6	0.6	0.6	0.8	1.0	1.0	0.8	0.6
80°	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
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

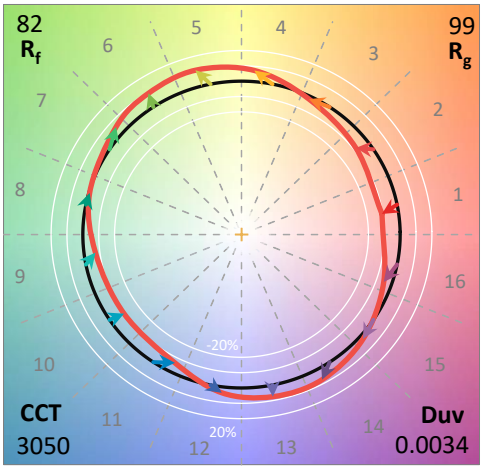
Test Information

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

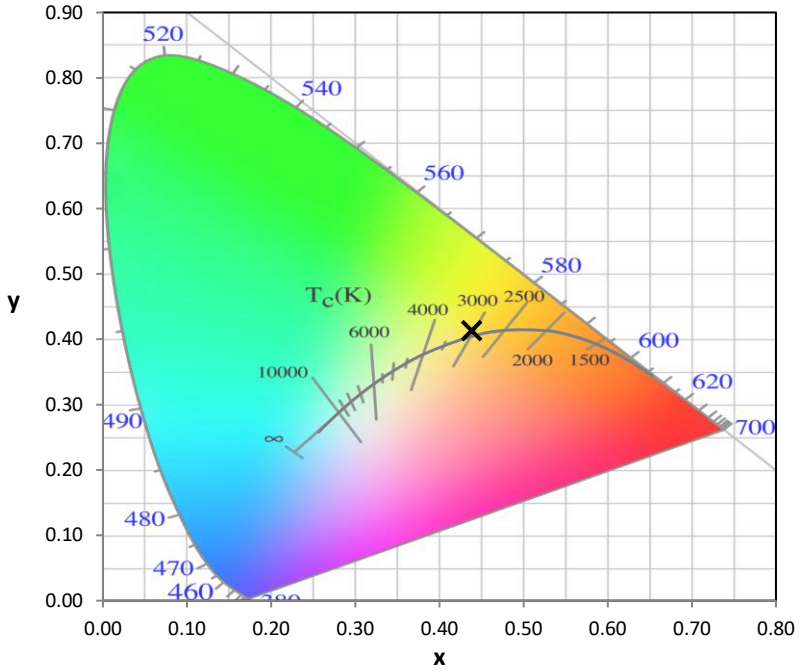
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

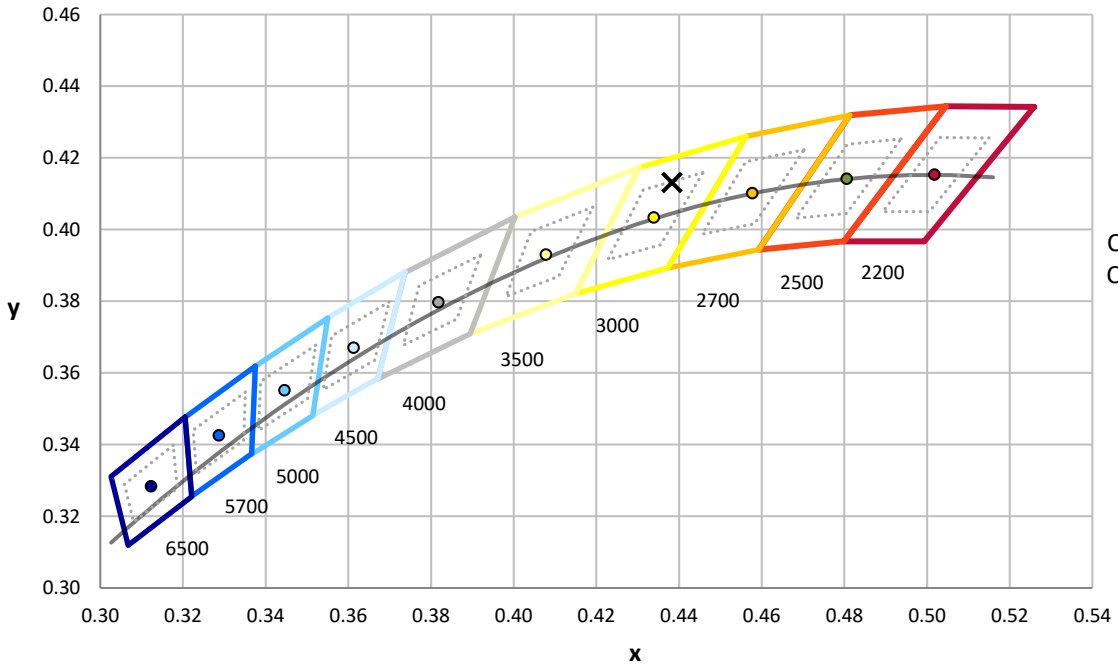
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

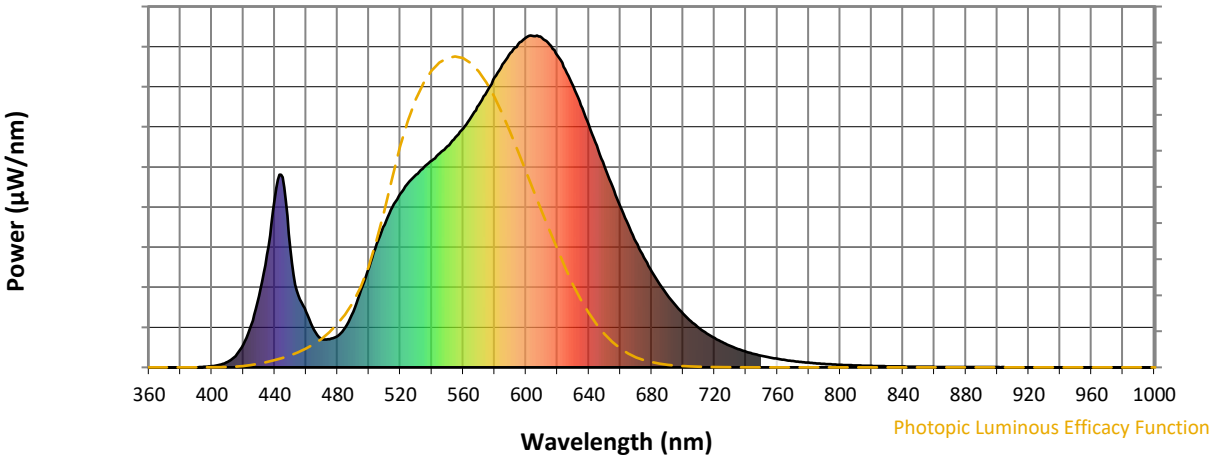


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

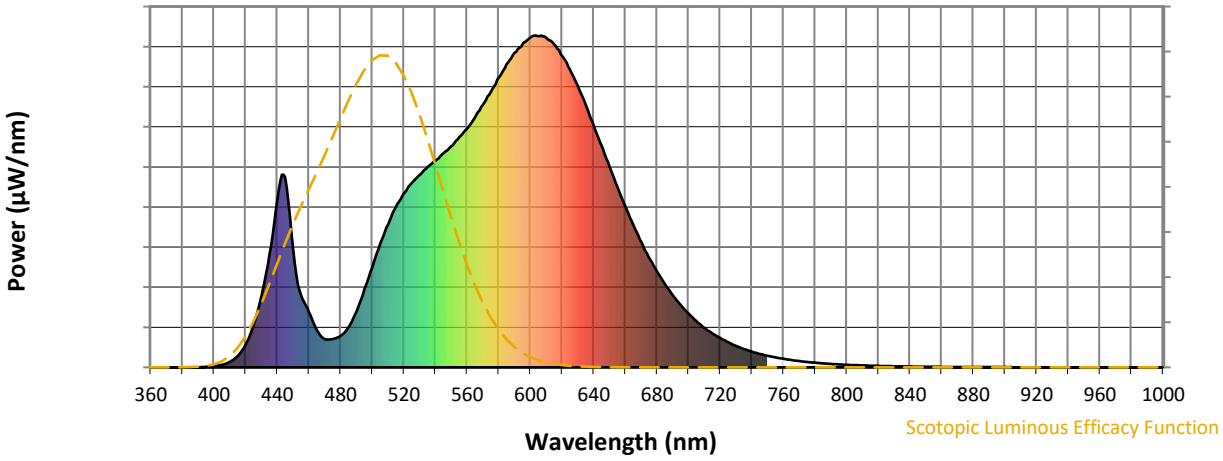


Photopic Lumens: NR

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

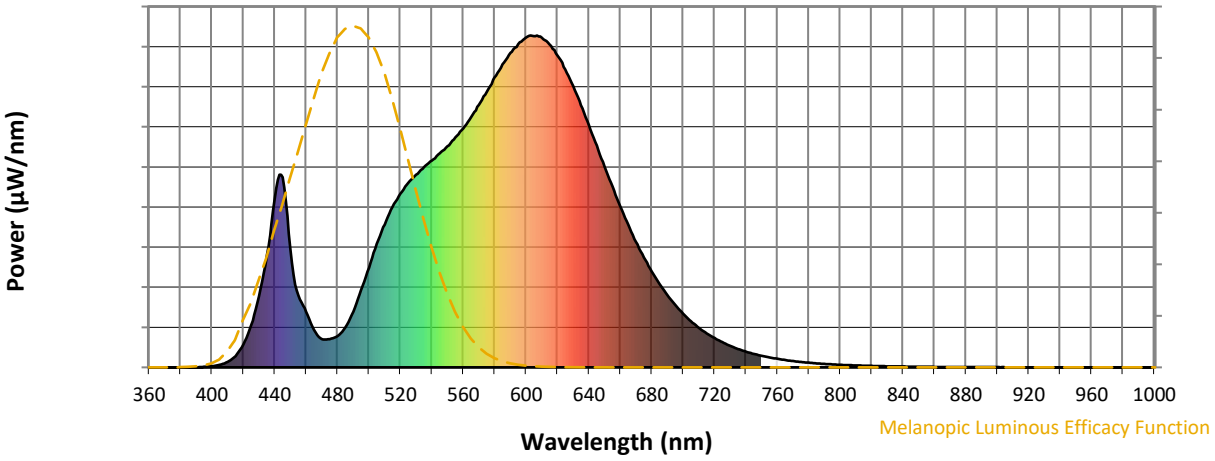


Scotopic Lumens: NR **S/P: 1.27**

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			

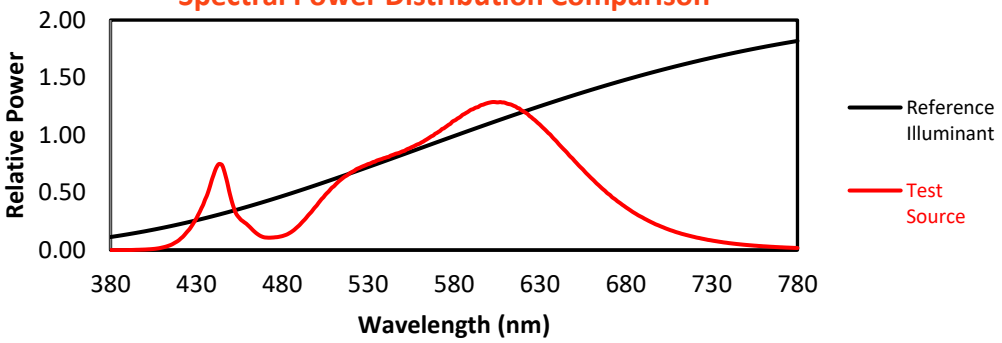
REPORT NUMBER: SP1-2408-195-9

TM-30-18

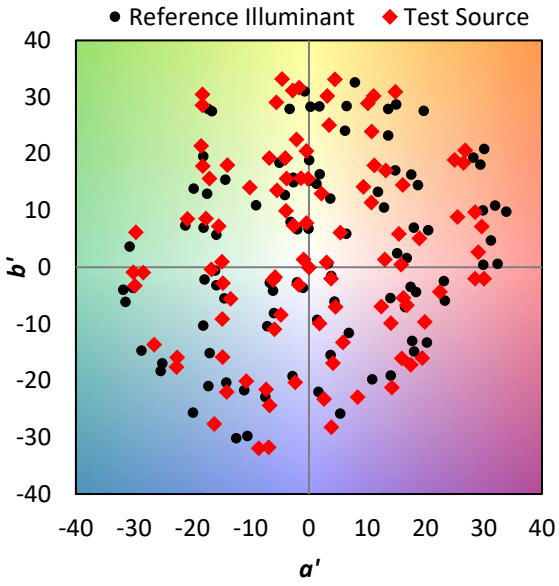
Summary

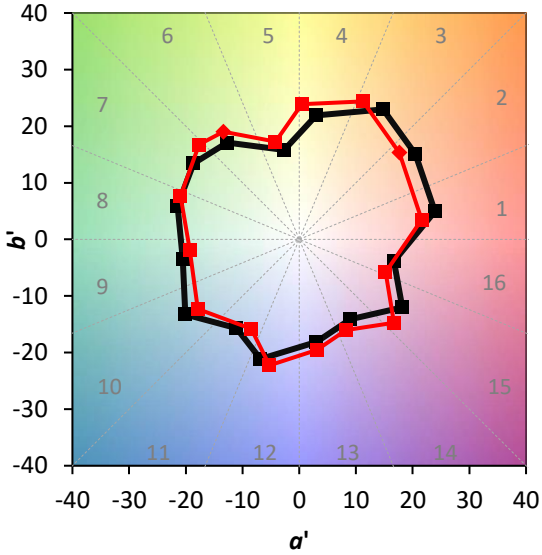
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

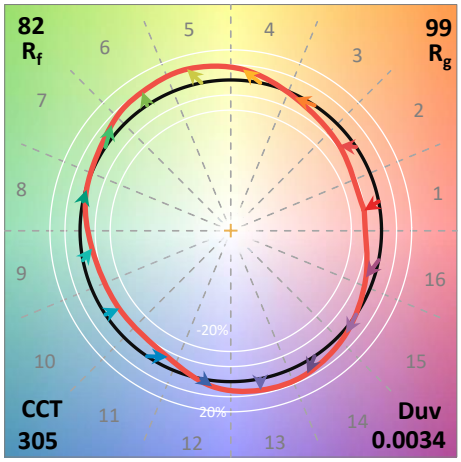
Spectral Power Distribution Comparison

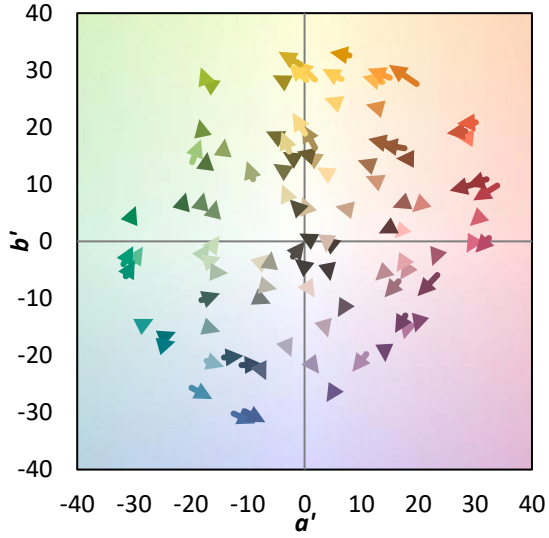


Color Vector Graphics







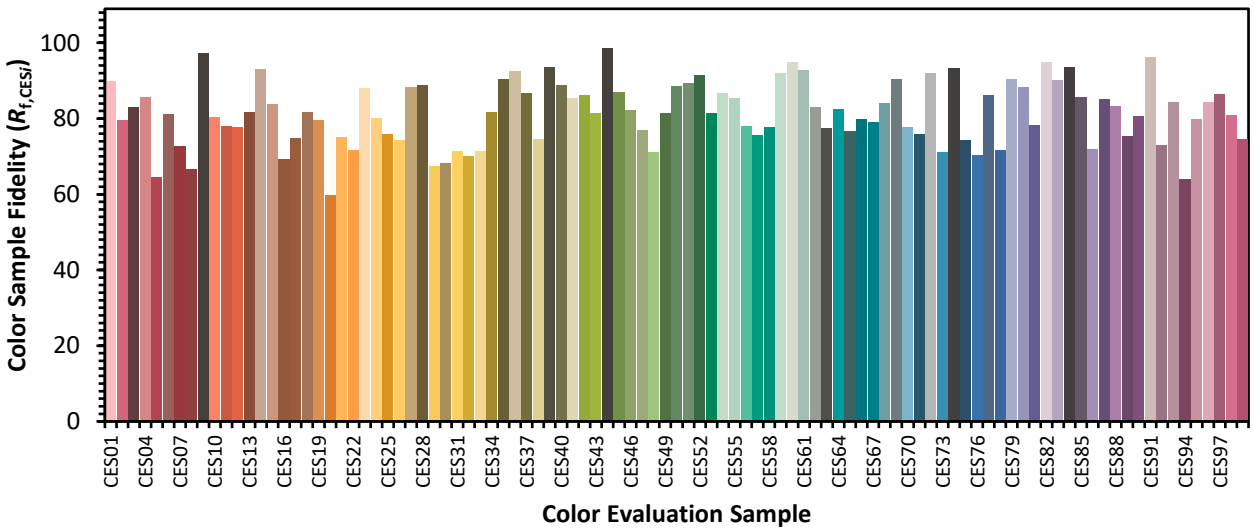


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

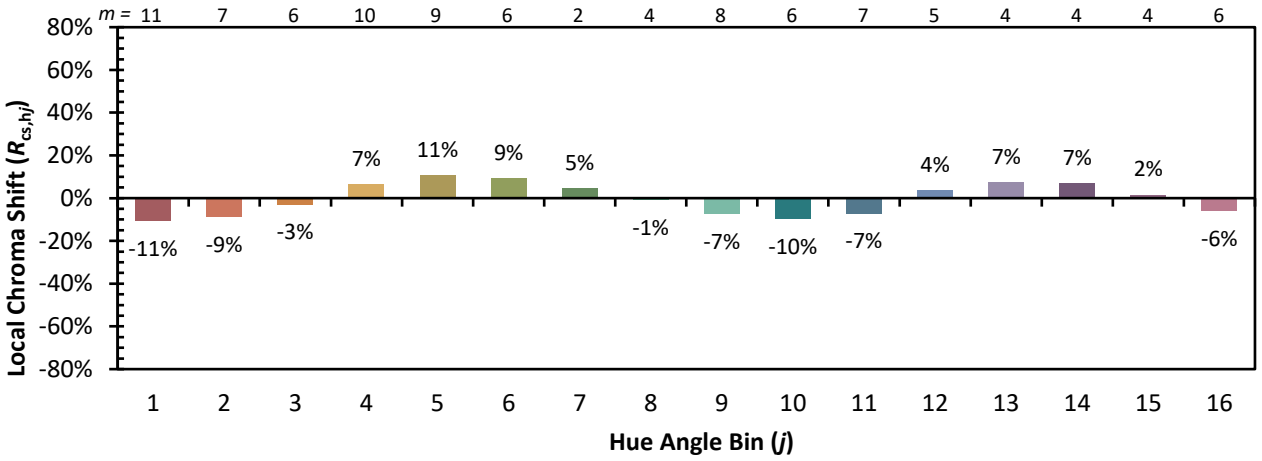
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

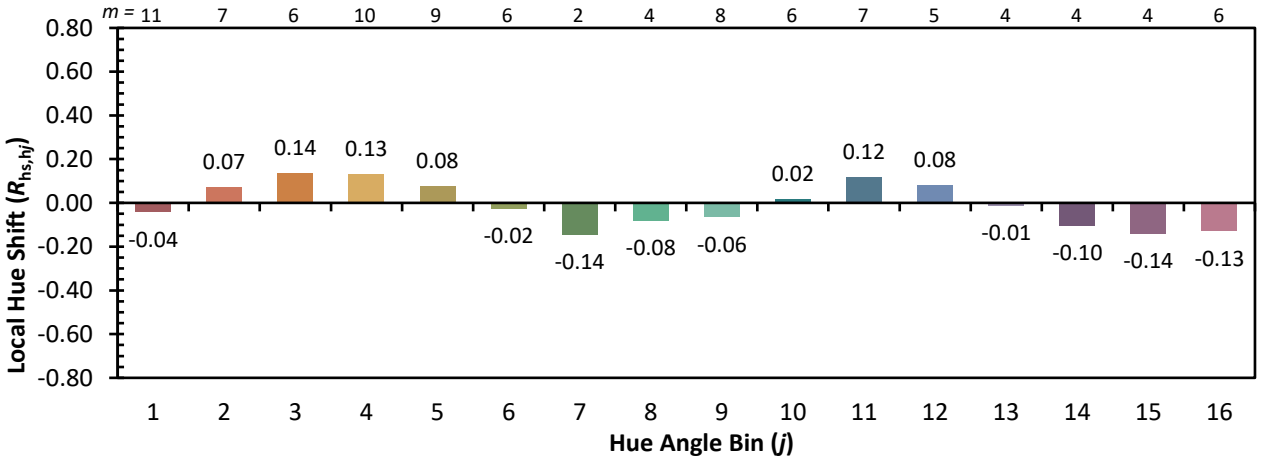


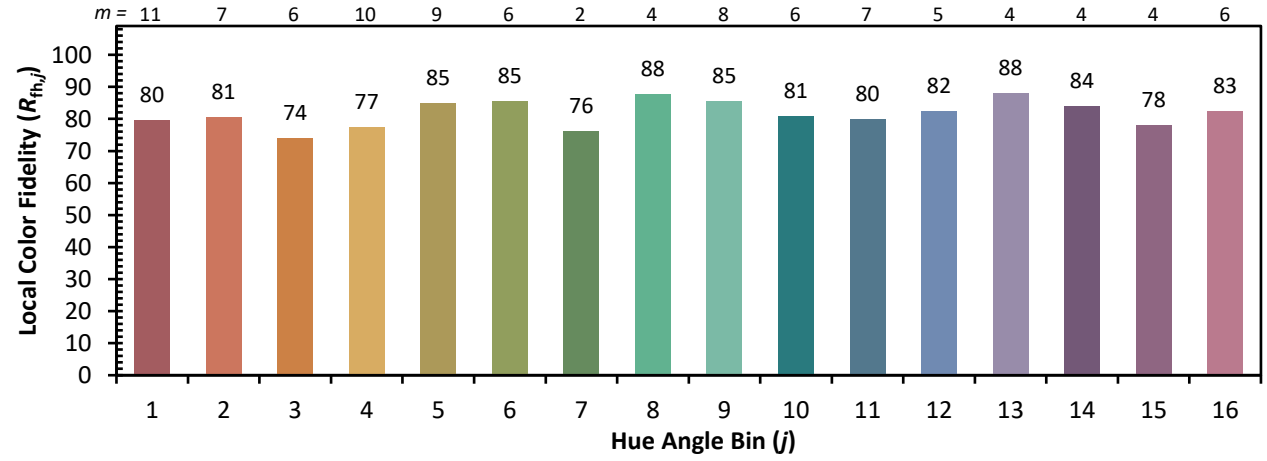
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



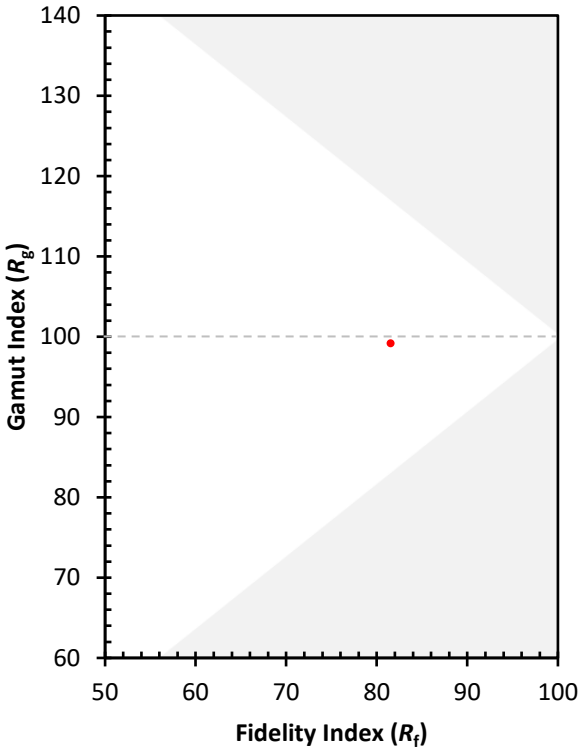


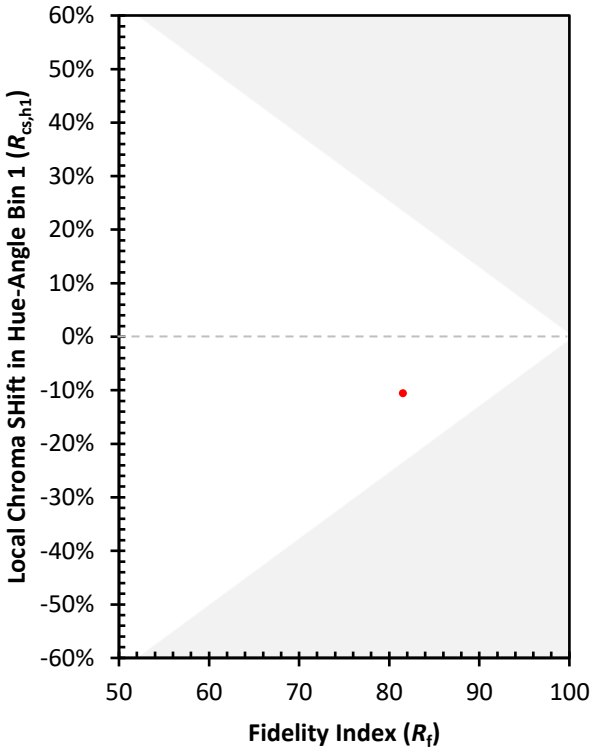


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)