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: P629091

Luminaire Tested: GWS-SA1A-830-U-T2R-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:	P629091
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-14)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1A-830-U-T2R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	1821.9 lumens
Efficiency:	N/A
Efficacy:	92.5 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B0 - U0 - G0

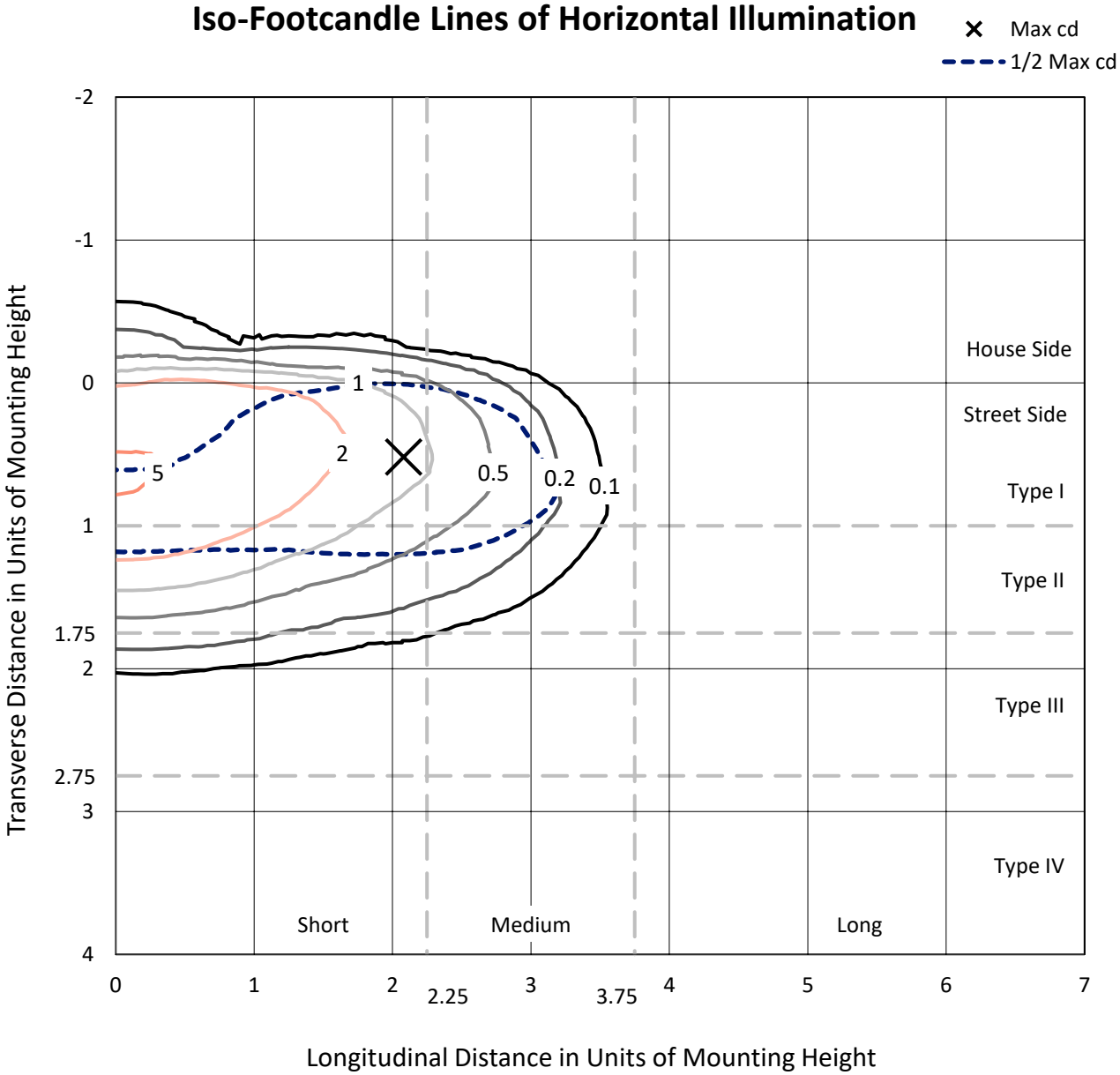
Input Watts (W):	19.7
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P629091
CATALOG NUMBER: GWS-SA1A-830-U-T2R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



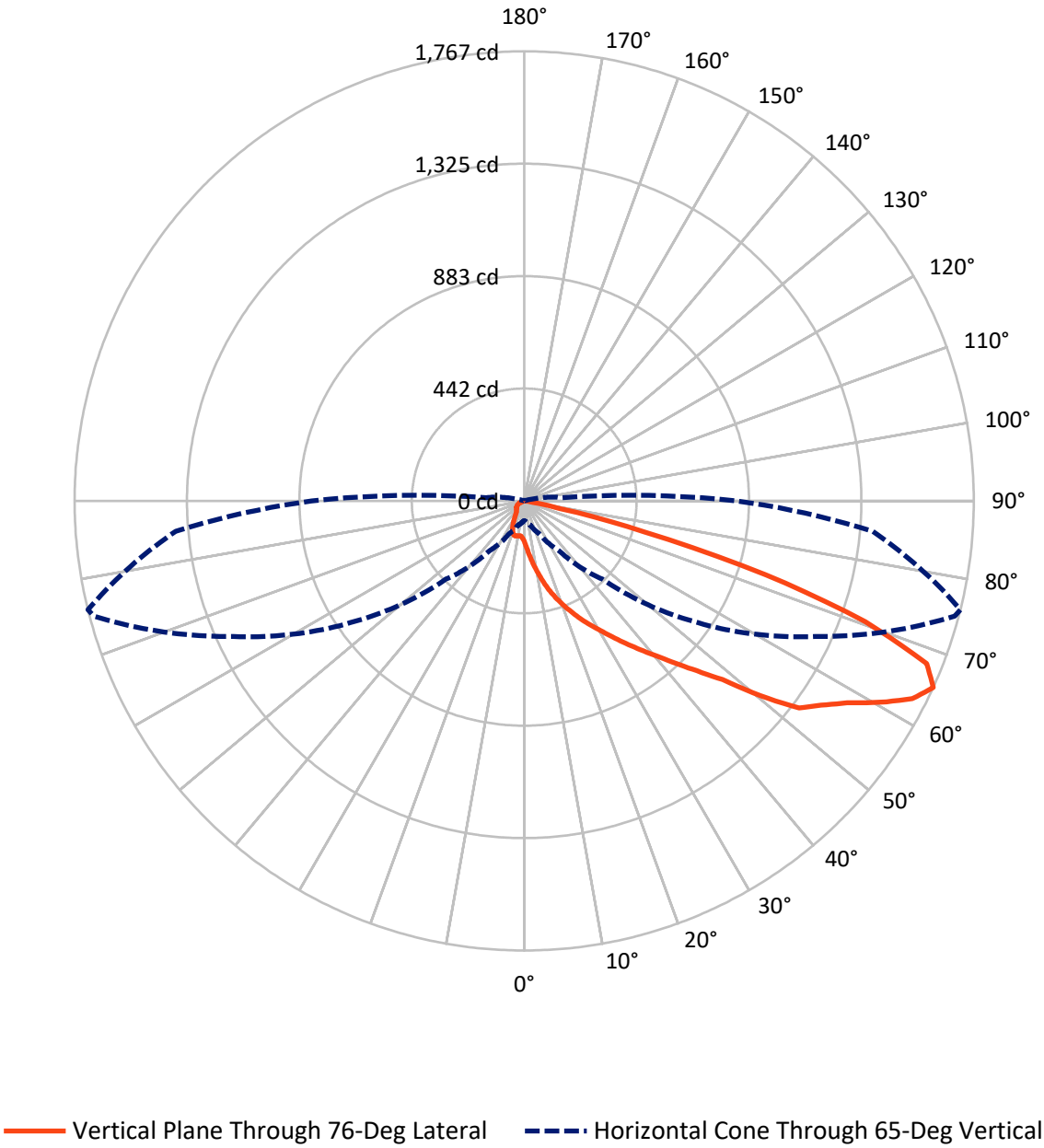
Based on 10 foot mounting height. Maximum calculated value = 5.5 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P629091
CATALOG NUMBER: GWS-SA1A-830-U-T2R-W-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

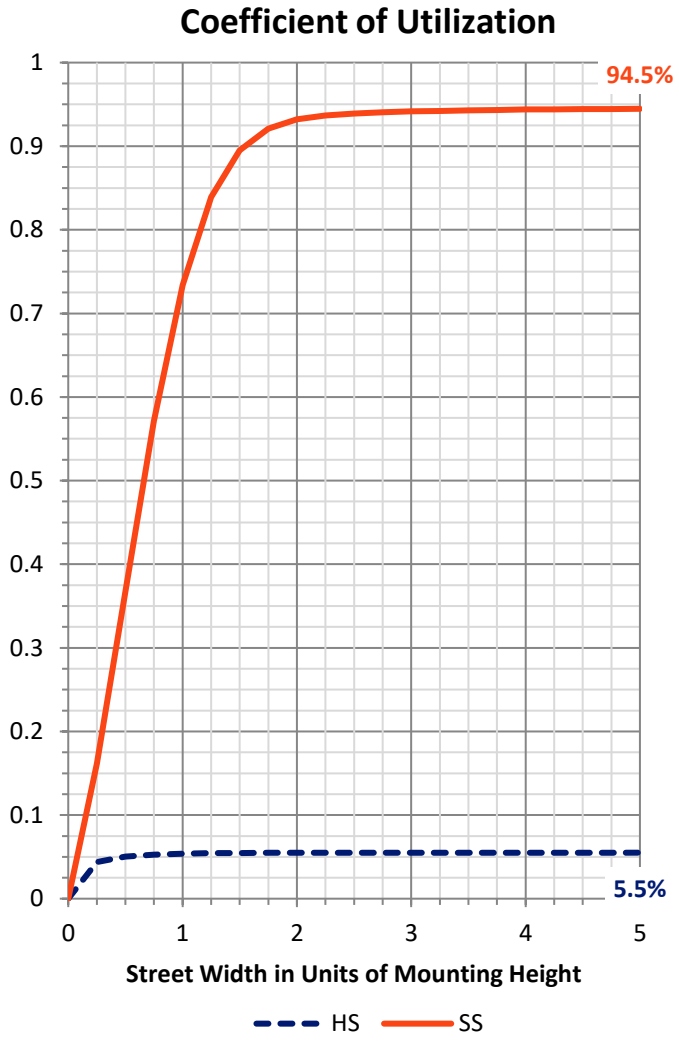
REPORT NUMBER: P629091
CATALOG NUMBER: GWS-SA1A-830-U-T2R-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	100.7	0.0	100.7
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	1721.2	0.0	1721.2
	% Fixture	94.5	0.0	94.5
Total	Lumens	1821.9	0.0	1821.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.6	1.1
10°-20°	74.5	4.1
20°-30°	151.9	8.3
30°-40°	270.2	14.8
40°-50°	399.4	21.9
50°-60°	457.3	25.1
60°-70°	348.9	19.1
70°-80°	97.7	5.4
80°-90°	2.5	0.1
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°	1821.9	100.0
0°-180°	1821.9	100.0



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

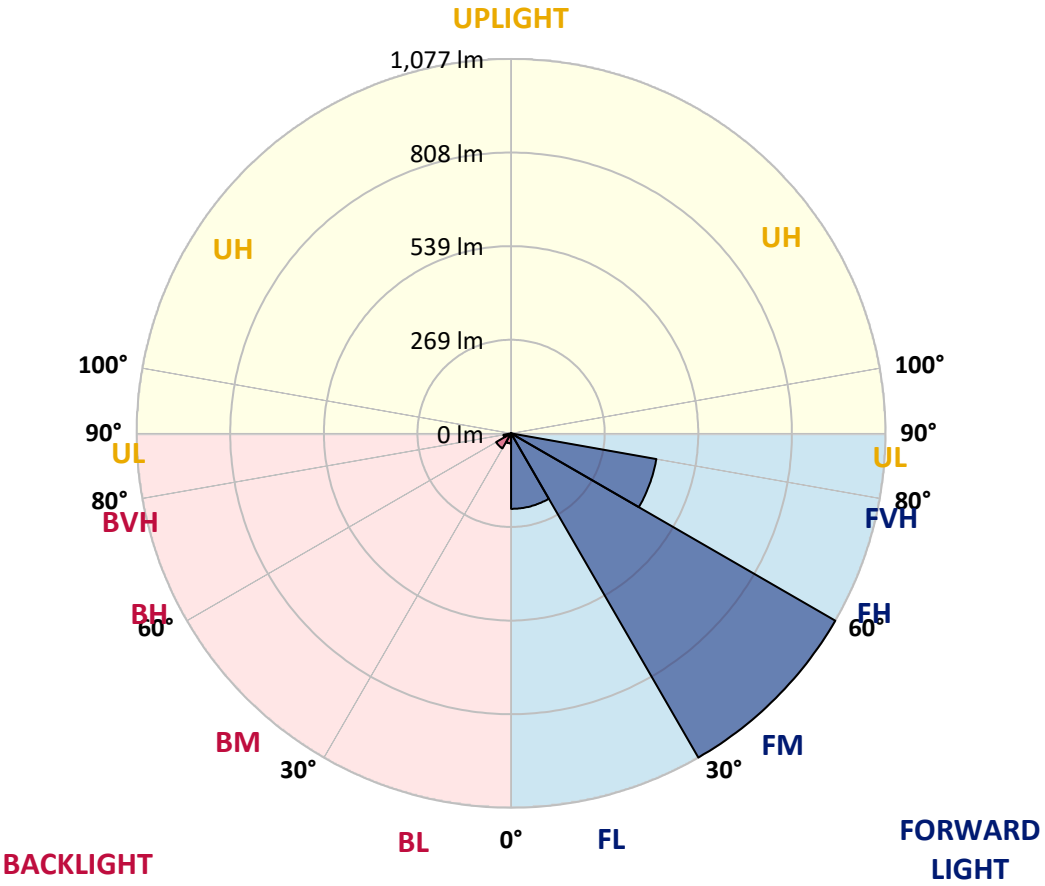
Scaled Data Report

REPORT NUMBER: P629091
CATALOG NUMBER: GWS-SA1A-830-U-T2R-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	217.2	11.9			
FM	(30°-60°)	1077.1	59.1			
FH	(60°-80°)	424.5	23.3			G0/660
FVH	(80°-90°)	2.3	0.1			G0/10
BL	(0°-30°)	28.7	1.6	B0/110		
BM	(30°-60°)	49.7	2.7	B0/220		
BH	(60°-80°)	22.1	1.2	B0/110		G0/110
BVH	(80°-90°)	0.1	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 II Short



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

Scaled Data Report

REPORT NUMBER: P629091
CATALOG NUMBER: GWS-SA1A-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	161.3	161.3	161.3	161.3	161.3	161.3	161.3	161.3	161.3	*161.3*	161.3
2.5°	248.6	252.3	249.4	244.5	235.2	226.1	214.4	198.4	185.6	*184.0*	172.0
5°	335.7	335.4	329.1	322.8	312.9	297.3	273.9	244.1	215.4	*213.0*	186.1
7.5°	387.6	388.0	384.5	379.6	369.9	353.9	329.4	293.5	251.5	*246.7*	205.4
10°	431.1	431.0	428.4	426.1	417.4	406.7	380.4	340.9	290.4	*282.8*	226.9
12.5°	463.8	465.0	466.3	468.5	464.8	454.3	429.5	386.4	329.7	*321.3*	251.5
15°	489.7	490.1	494.9	503.7	506.7	501.2	478.7	430.5	368.6	*361.3*	279.9
17.5°	497.5	498.2	506.4	522.5	538.7	541.7	524.7	474.8	406.8	*399.1*	307.4
20°	513.9	515.3	521.5	535.6	556.0	572.5	565.9	519.7	445.0	*434.8*	335.6
22.5°	565.4	566.2	564.1	565.9	576.4	595.5	599.5	563.1	484.2	*473.4*	366.0
25°	654.0	654.3	639.6	625.6	617.7	621.2	630.2	603.1	523.1	*512.4*	394.4
27.5°	746.0	747.1	729.4	705.8	677.4	661.3	658.7	639.7	562.3	*550.5*	422.4
30°	832.6	832.6	814.0	785.1	747.2	715.7	697.0	676.6	604.2	*591.3*	451.0
32.5°	910.5	909.8	886.0	854.8	817.4	782.7	743.5	715.2	650.9	*636.5*	484.1
35°	974.8	973.2	946.1	916.2	876.2	850.4	806.7	756.6	701.4	*687.0*	518.1
37.5°	1023.4	1021.6	996.8	965.1	928.0	911.3	874.7	806.4	754.7	*741.6*	555.8
40°	1049.8	1046.2	1029.0	1005.4	974.3	959.7	944.5	868.1	817.4	*801.0*	600.4
42.5°	1057.5	1053.3	1042.0	1031.0	1012.2	1000.7	1017.1	937.7	886.2	*872.1*	651.2
45°	1034.6	1032.1	1031.2	1039.1	1042.5	1045.7	1086.1	1014.8	962.2	*951.5*	715.2
47.5°	979.2	978.5	987.1	1020.1	1056.1	1090.3	1161.0	1109.9	1060.6	*1049.1*	804.6
50°	876.8	883.5	907.4	965.4	1037.3	1115.5	1231.2	1241.7	1220.0	*1203.1*	921.2
52.5°	716.8	729.6	783.4	871.5	974.8	1108.4	1263.6	1347.3	1369.5	*1352.0*	1004.8
55°	562.5	574.4	622.4	734.1	872.0	1054.1	1265.0	1383.7	1432.1	*1415.9*	1061.3
57.5°	419.0	430.0	473.5	580.4	732.0	947.4	1230.4	1404.0	1506.5	*1496.1*	1150.5
60°	273.9	284.7	324.1	417.5	567.8	791.9	1145.0	1399.8	1607.7	*1606.7*	1260.2
62.5°	151.9	160.5	189.0	261.9	396.3	613.3	1010.9	1357.5	1705.7	*1711.8*	1350.5
65°	*77.7*	*83.2*	*100.6*	*144.0*	*239.9*	*434.8*	*834.5*	*1260.6*	*1751.0*	*1766.6*	*1374.3*
67.5°	50.9	52.6	56.8	74.8	128.4	273.5	628.1	1105.3	1687.2	*1705.4*	1294.5
70°	41.3	42.8	45.2	49.9	66.2	145.3	412.5	882.8	1409.8	*1422.1*	1030.8
72.5°	30.3	32.2	36.9	40.0	47.8	79.7	214.6	579.5	968.2	*989.9*	647.8
75°	22.3	23.5	27.4	31.6	39.0	50.4	82.1	304.6	499.9	*487.3*	272.1
77.5°	13.4	14.3	17.5	20.2	27.9	31.4	28.7	112.6	152.1	*143.0*	65.8
80°	6.6	7.4	11.5	15.2	17.8	12.6	12.0	31.4	33.8	*33.8*	16.5
82.5°	2.3	2.9	6.2	10.0	8.7	4.9	5.7	8.1	9.1	*9.6*	4.9
85°	0.0	0.0	1.5	2.9	1.3	0.6	1.5	1.8	2.3	*2.4*	1.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	*0.6*	0.6
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: P629091
CATALOG NUMBER: GWS-SA1A-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	161.3	161.3	161.3	161.3	161.3	161.3	161.3	161.3	161.3	161.3	161.3
2.5°	165.5	157.9	146.4	136.0	128.1	120.7	115.0	110.5	109.6	107.1	107.4
5°	173.0	159.2	138.0	121.6	110.1	102.4	95.9	91.0	88.9	86.8	85.2
7.5°	184.5	164.5	134.7	114.8	101.4	89.4	79.4	71.3	67.4	64.9	63.3
10°	198.6	172.0	134.9	110.8	90.9	72.6	58.8	49.9	45.7	44.4	44.2
12.5°	215.4	181.4	136.2	104.1	75.6	53.9	43.6	39.5	38.2	37.1	37.1
15°	233.2	191.9	136.2	92.0	57.7	42.1	37.7	35.1	33.5	32.9	32.6
17.5°	252.0	201.8	133.0	75.3	44.2	37.1	33.5	31.1	29.8	28.8	28.5
20°	272.1	211.2	124.9	57.7	37.9	33.2	29.8	27.4	26.1	25.1	25.1
22.5°	292.5	219.9	111.7	44.4	33.5	29.5	26.2	24.0	22.7	21.7	21.7
25°	311.4	225.8	94.9	36.6	30.3	26.2	23.3	21.1	19.6	18.9	18.6
27.5°	329.1	229.5	76.3	32.2	27.2	23.5	20.4	18.3	17.2	16.7	16.4
30°	347.4	230.5	58.3	29.3	24.6	20.7	17.8	16.2	15.2	14.6	14.6
32.5°	365.2	229.3	44.5	26.9	22.3	18.3	15.9	14.4	13.6	13.1	13.0
35°	383.3	224.1	36.1	24.8	20.1	16.0	14.1	13.0	12.5	11.8	11.8
37.5°	403.1	217.2	31.4	22.7	17.8	14.4	12.6	11.8	11.2	10.7	10.5
40°	427.7	209.1	28.8	20.9	15.7	13.0	11.3	10.5	10.0	9.6	9.4
42.5°	456.9	201.1	27.5	18.9	14.1	11.5	10.2	9.2	8.7	8.1	7.9
45°	498.2	199.4	26.1	16.8	12.6	10.4	8.9	7.9	7.3	6.8	6.6
47.5°	564.6	204.4	23.6	14.6	11.2	9.1	7.6	6.8	6.0	5.5	5.2
50°	630.5	203.1	21.2	12.6	9.9	7.8	6.5	5.7	4.9	4.4	4.2
52.5°	666.4	196.9	18.9	11.2	8.6	6.6	5.5	4.5	4.0	3.6	3.4
55°	699.0	194.5	16.7	9.7	7.3	5.8	4.5	3.7	3.4	2.9	2.8
57.5°	762.8	200.2	14.7	8.4	6.3	5.0	3.9	3.1	2.8	2.3	2.1
60°	829.5	200.8	12.6	7.3	5.5	4.2	3.1	2.4	2.1	1.6	1.5
62.5°	864.3	184.5	10.4	6.2	4.5	3.6	2.6	1.9	1.6	1.0	1.0
65°	*835.2*	*149.2*	*8.7*	*5.0*	*3.6*	*2.8*	*1.9*	*1.5*	*1.0*	*0.5*	*0.2*
67.5°	739.2	106.1	7.3	4.0	2.6	1.9	1.5	1.0	0.2	0.0	0.0
70°	541.2	60.6	5.7	2.9	1.9	1.3	1.0	0.5	0.0	0.0	0.0
72.5°	332.7	32.4	4.2	1.9	1.5	1.0	0.8	0.3	0.0	0.0	0.0
75°	126.2	15.5	2.6	1.3	1.1	0.8	0.5	0.2	0.0	0.0	0.0
77.5°	34.2	7.6	1.5	1.0	0.8	0.5	0.3	0.0	0.0	0.0	0.0
80°	8.9	3.6	1.0	0.6	0.5	0.3	0.0	0.0	0.0	0.0	0.0
82.5°	3.1	1.6	0.5	0.5	0.3	0.2	0.0	0.0	0.0	0.0	0.0
85°	1.3	0.6	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	0.2	0.2	0.2	0.2	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

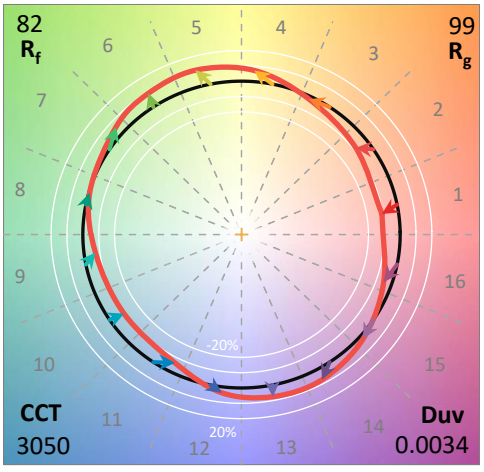
Test Information

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

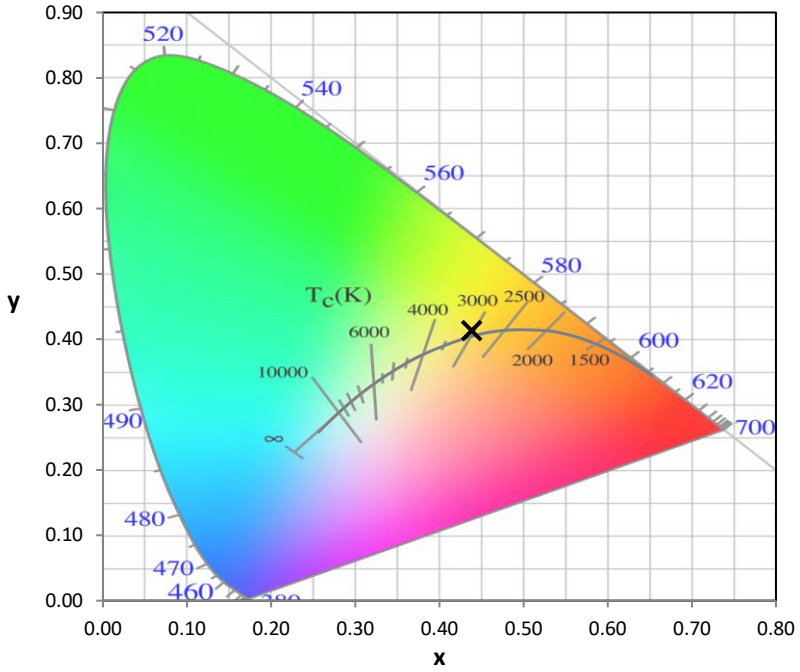
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

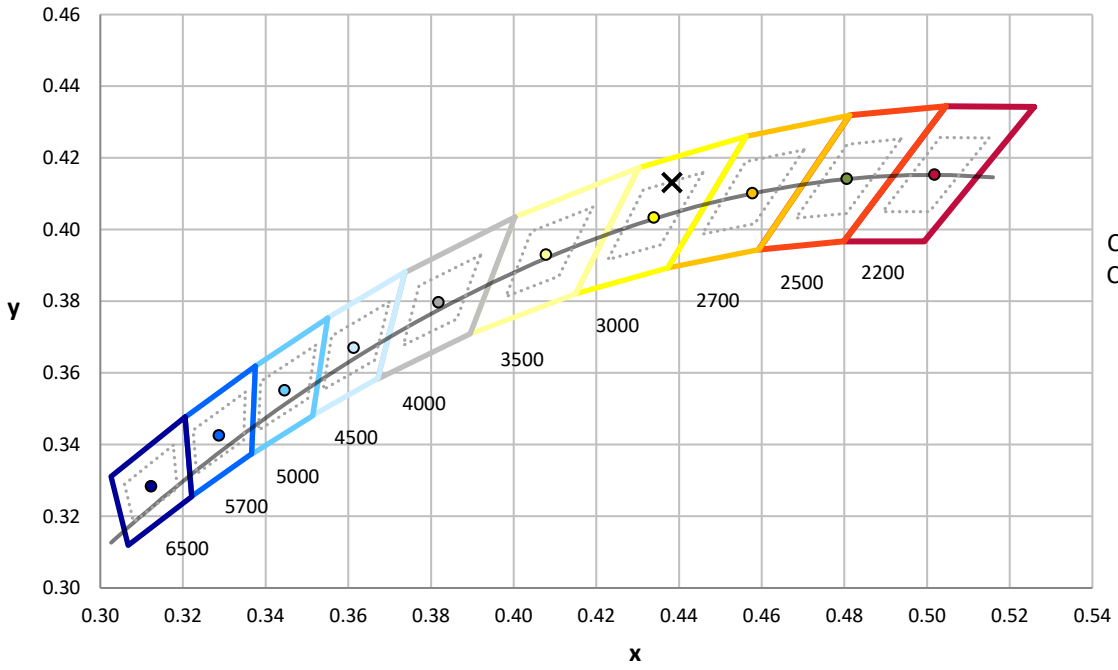
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

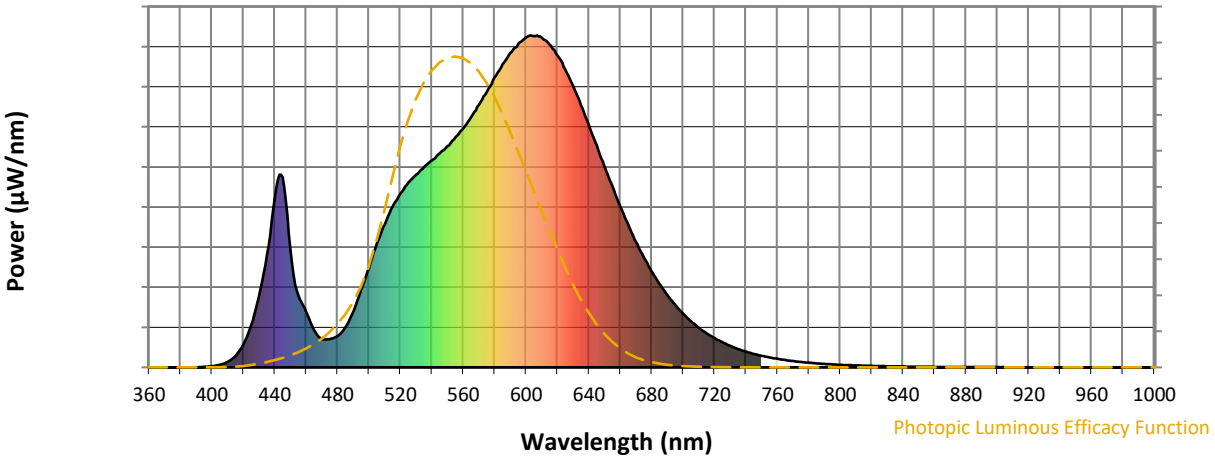


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

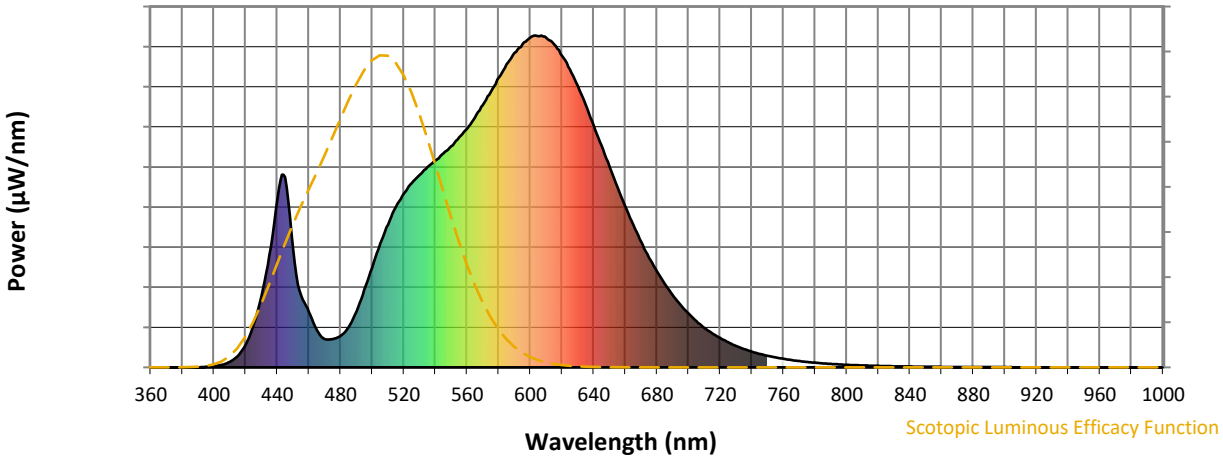


Photopic Lumens: NR

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

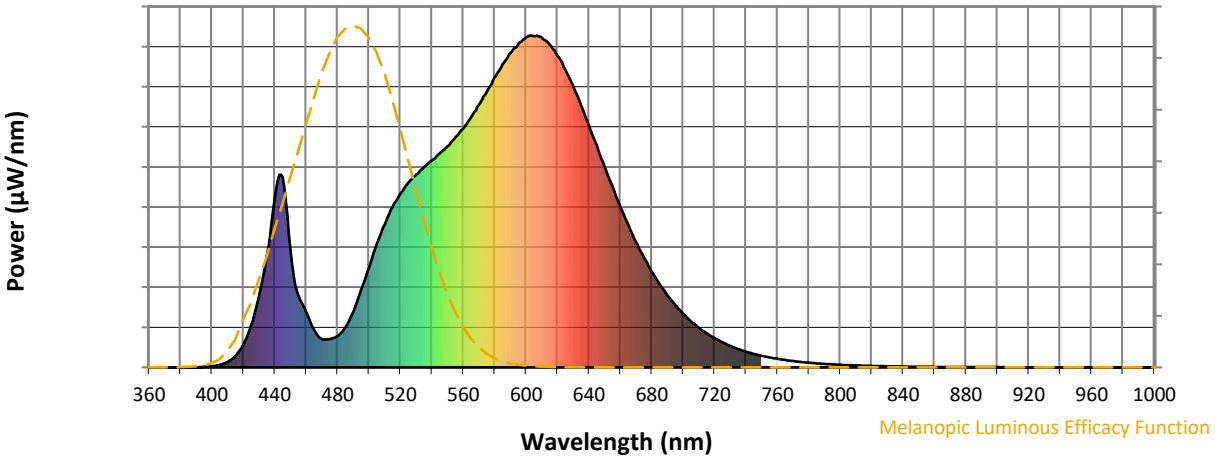


Scotopic Lumens: NR **S/P: 1.27**

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			

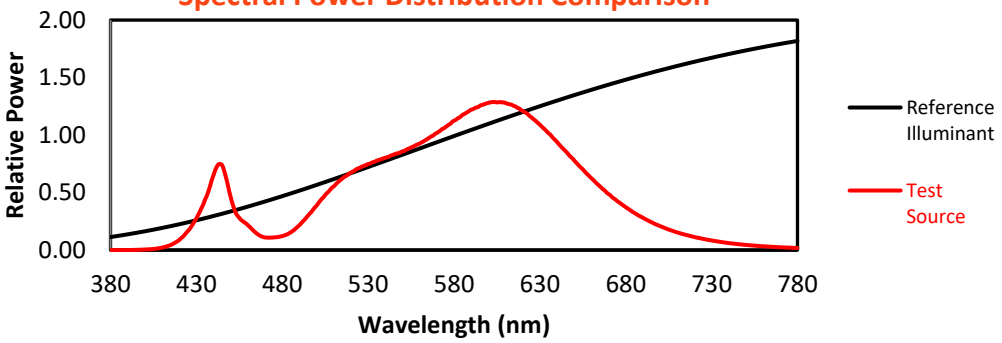
REPORT NUMBER: SP1-2408-195-9

TM-30-18

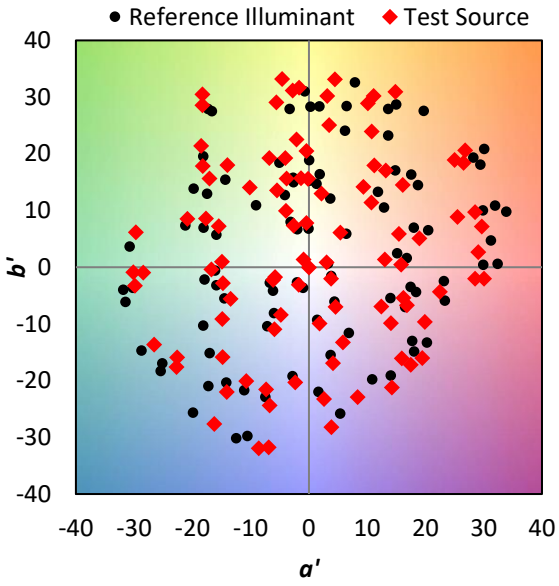
Summary

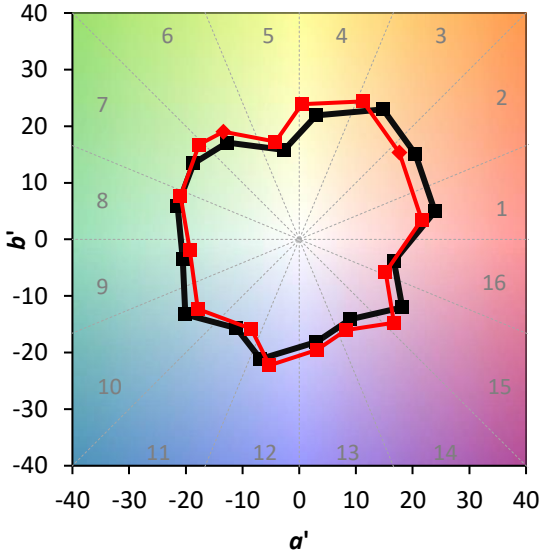
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

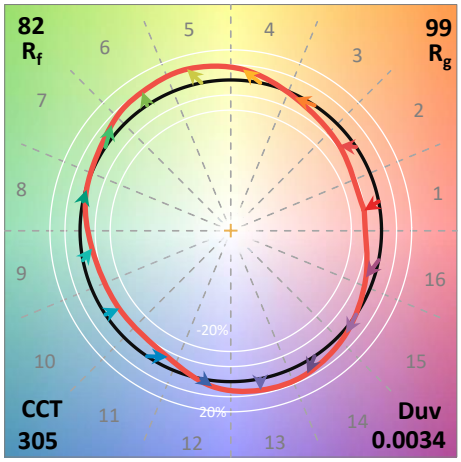
Spectral Power Distribution Comparison

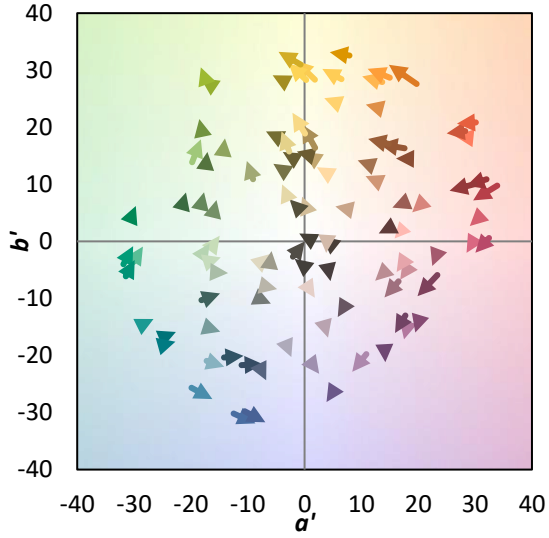


Color Vector Graphics







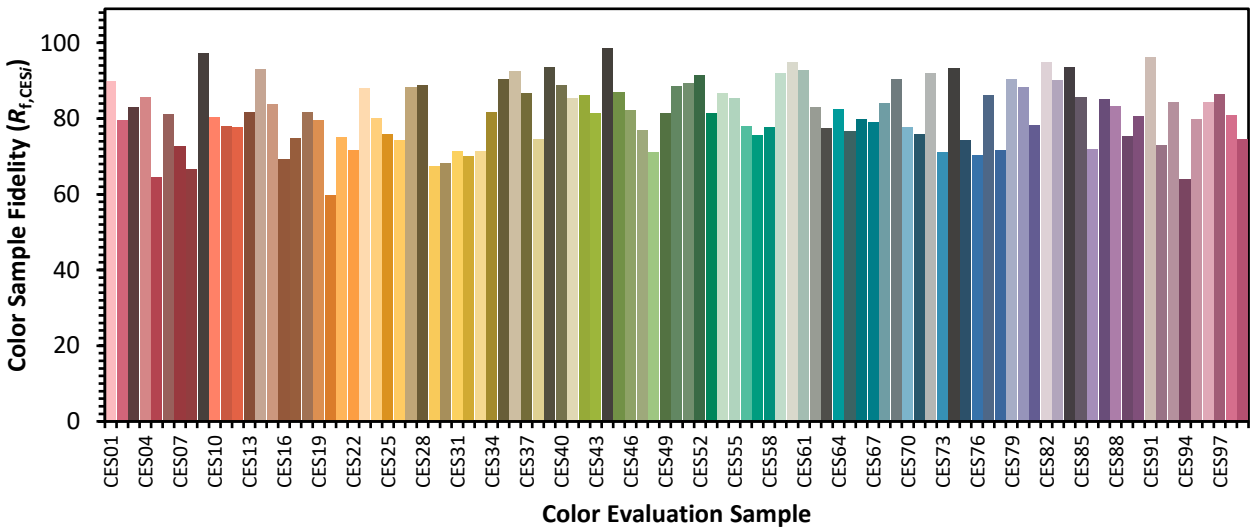


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

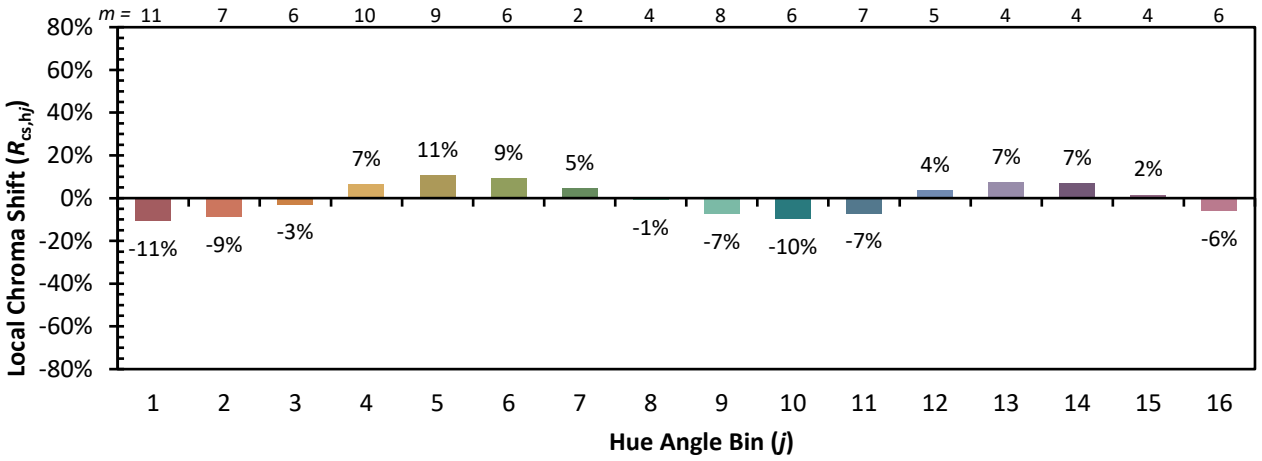
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

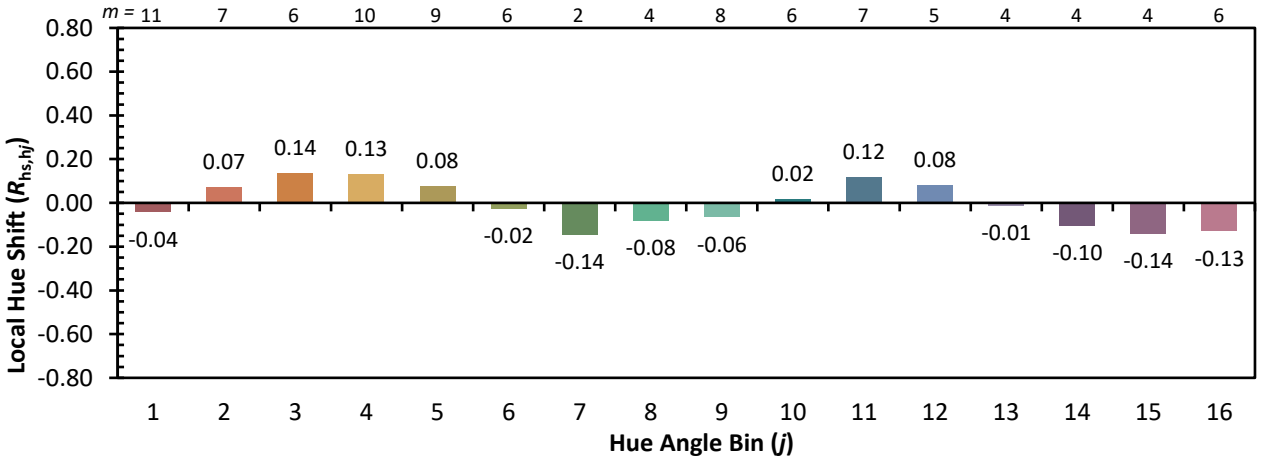


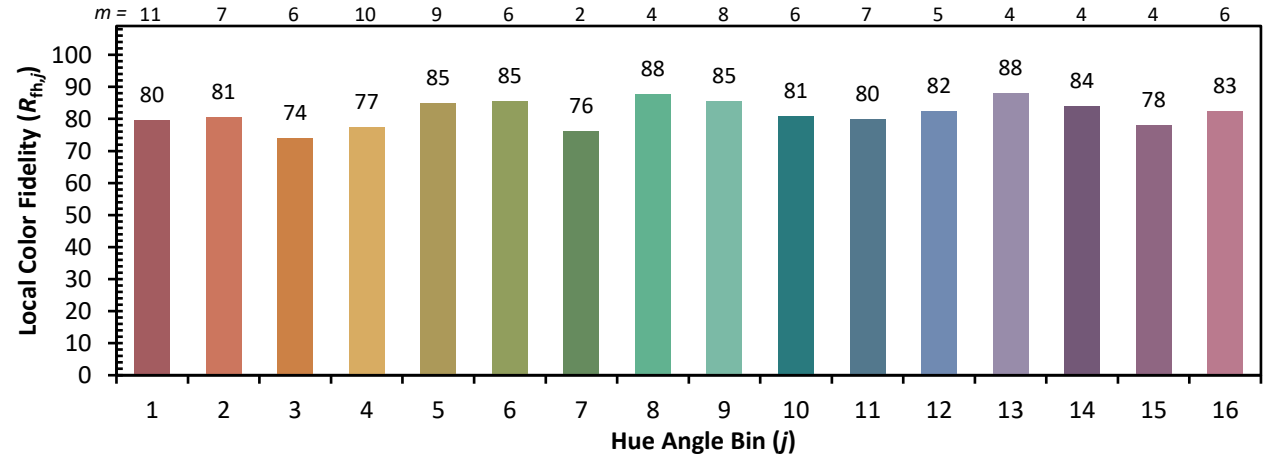
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



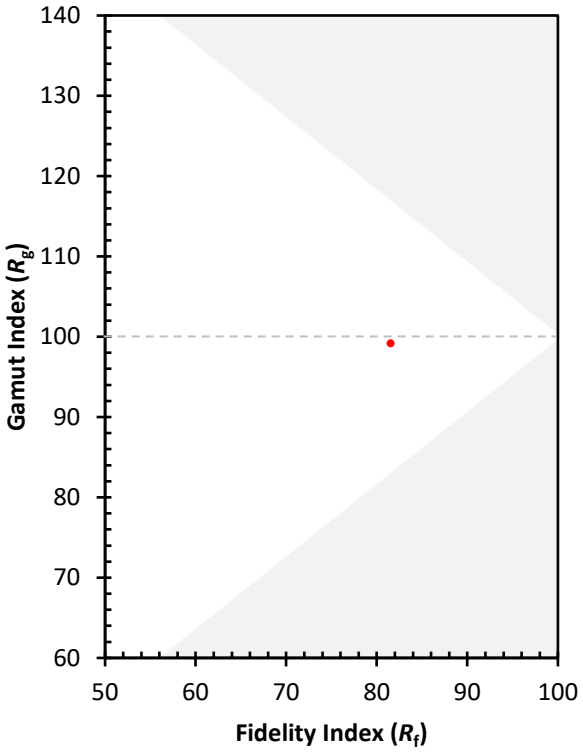


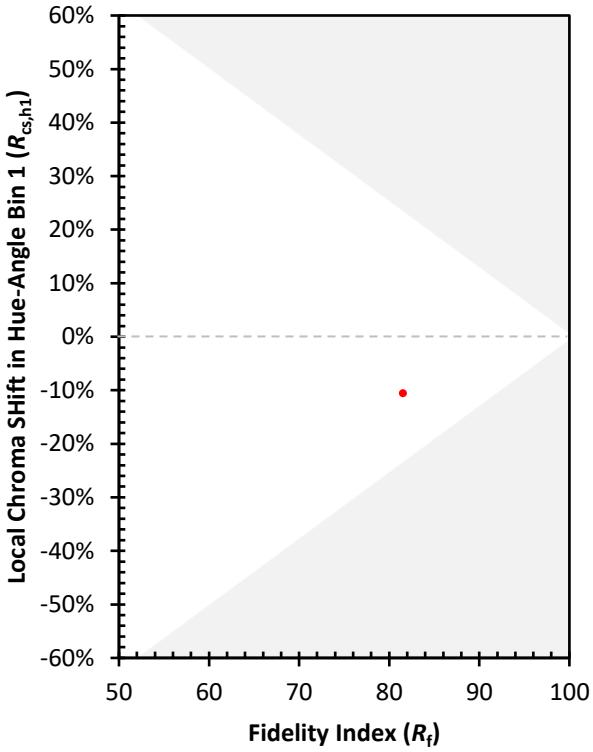


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)