

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P437079

Luminaire Tested: **ISS-SA1A-830-U-SL3-HSS**

Issue Date: 12/9/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P437079  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/9/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-SA1A-830-U-SL3-HSS  
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE  
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1846 lumens  
Efficiency: N/A  
Efficacy: 91.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1

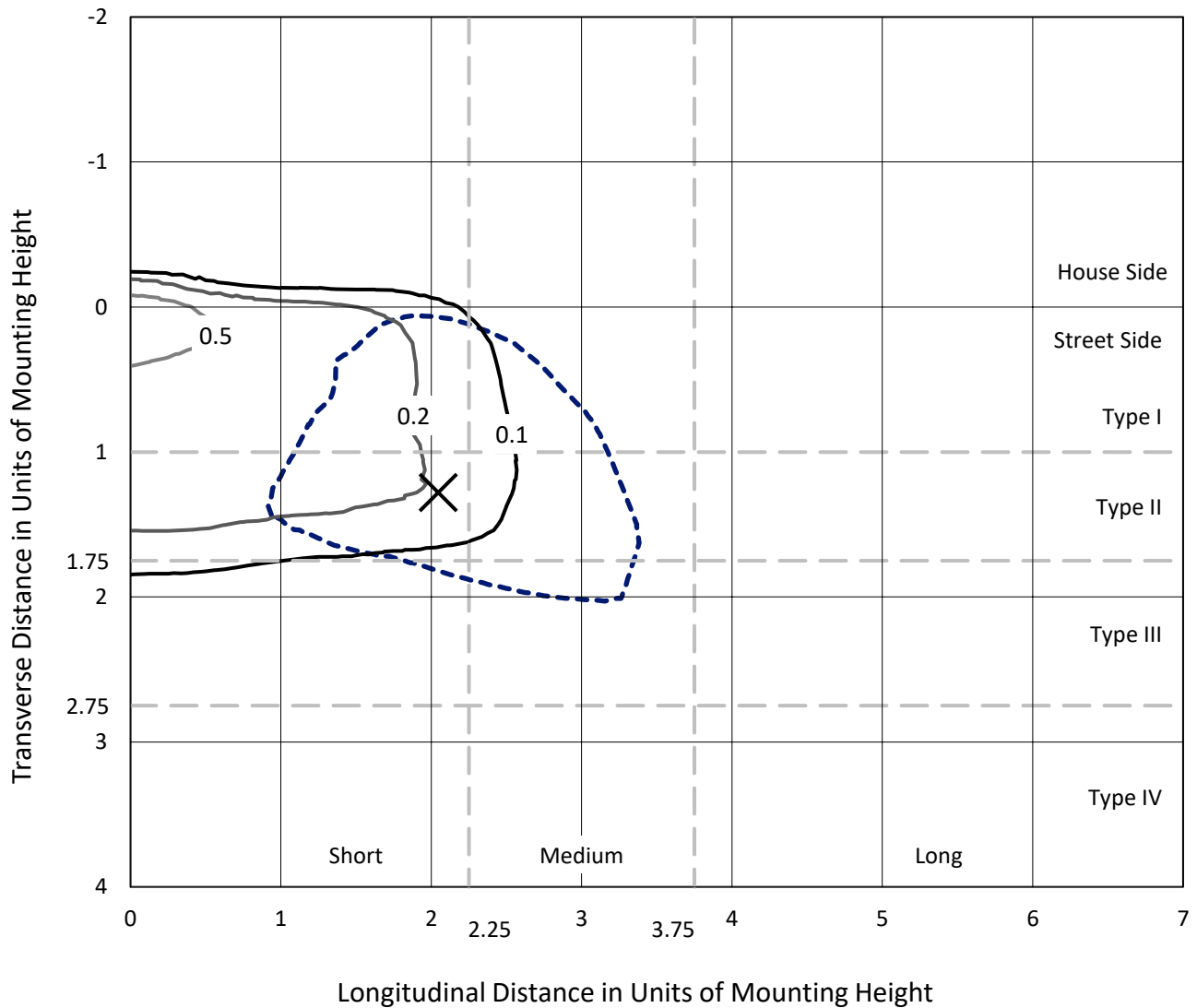
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

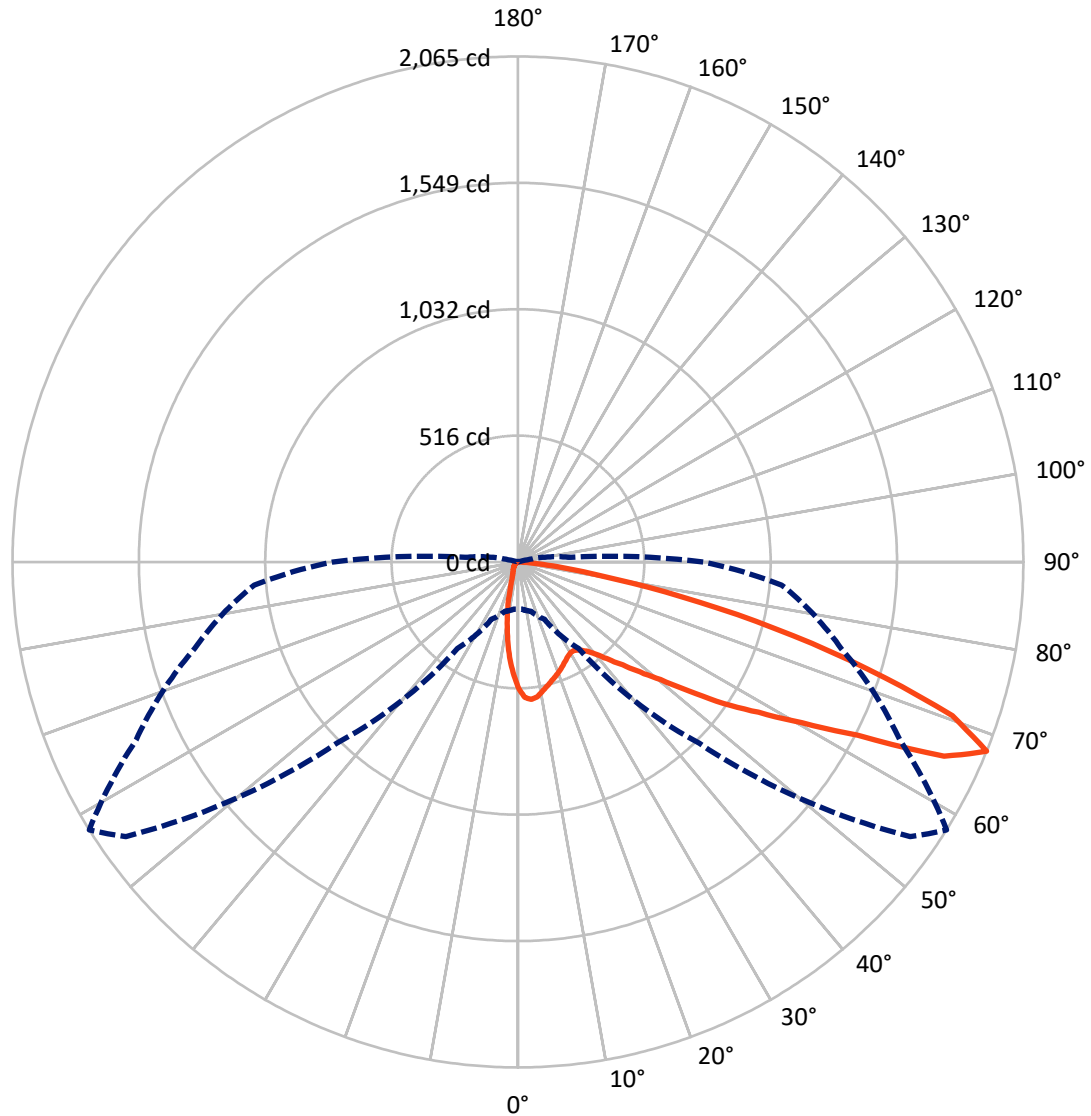
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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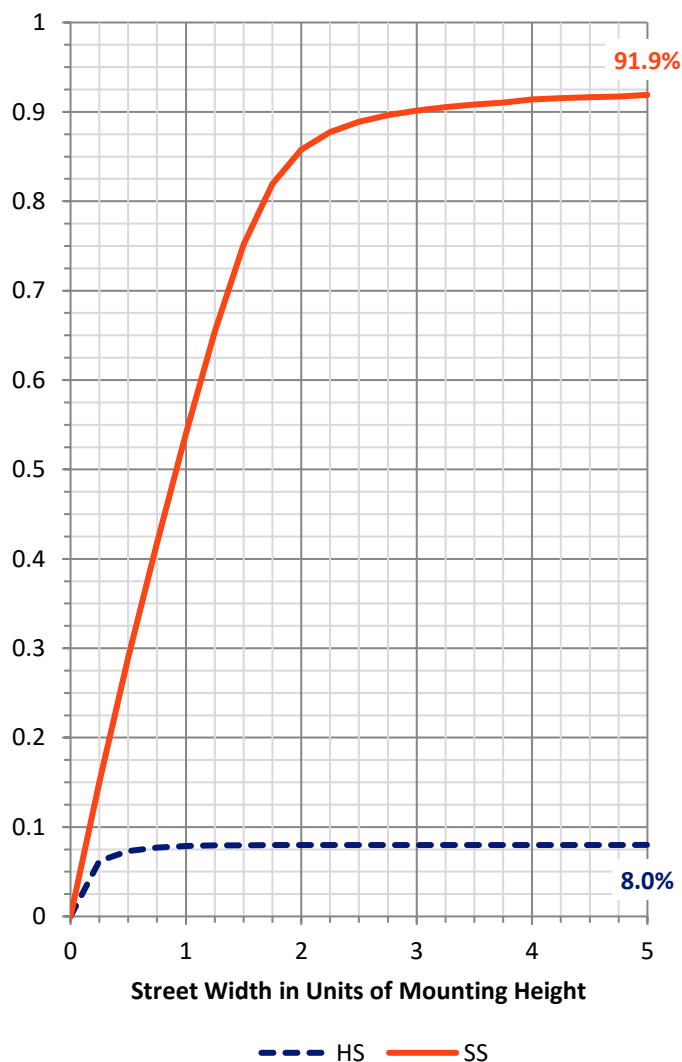
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	148.8	0.0	148.8
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	1697.2	0.0	1697.2
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	1846.0	0.0	1846.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.6	2.3
10°-20°	87.7	4.8
20°-30°	118.7	6.4
30°-40°	163.2	8.8
40°-50°	255.5	13.8
50°-60°	430.4	23.3
60°-70°	510.8	27.7
70°-80°	221.8	12.0
80°-90°	16.3	0.9
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°	1846.0	100.0
0°-180°	1846.0	100.0

**Coefficient of Utilization**



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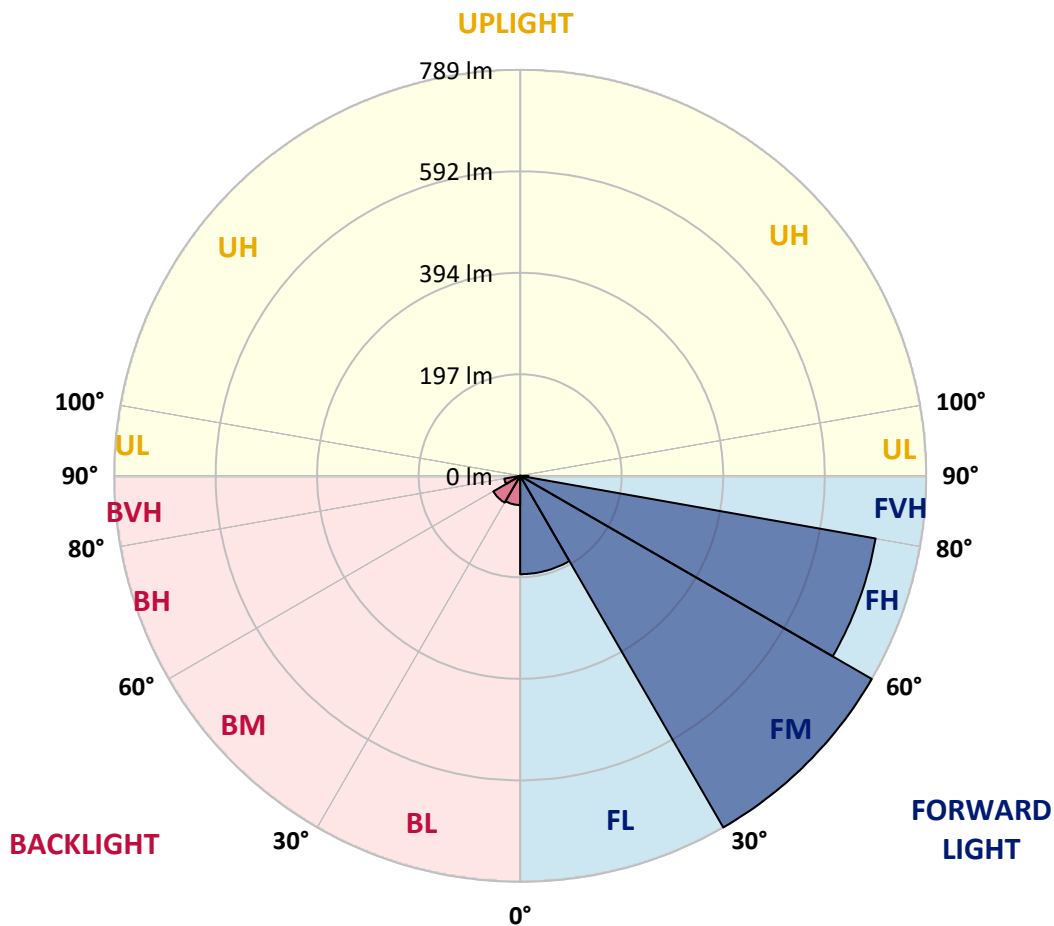
CATALOG NUMBER: ISS-SA1A-830-U-SL3-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	191.2	10.4			
FM (30°-60°)	788.9	42.7			
FH (60°-80°)	701.3	38.0			G1/1800
FVH (80°-90°)	15.8	0.9			G1/100
BL (0°-30°)	56.8	3.1	B0/110		
BM (30°-60°)	60.2	3.3	B0/220		
BH (60°-80°)	31.3	1.7	B0/110		G0/110
BVH (80°-90°)	0.5	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-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	519.7	519.7	519.7	519.7	519.7	519.7	519.7	519.7	519.7	519.7	519.7
2.5°	580.1	577.0	575.4	574.6	569.0	564.2	554.7	553.9	547.6	535.6	523.7
5°	567.4	569.8	570.6	573.0	572.2	572.2	565.8	564.2	555.5	538.8	515.8
7.5°	539.6	538.8	540.4	546.8	549.9	556.3	555.5	557.1	553.1	534.8	502.3
10°	499.1	500.7	505.4	511.0	519.7	530.9	538.0	539.6	542.8	527.7	489.5
12.5°	461.7	464.1	467.3	478.4	488.0	505.4	518.9	522.1	528.5	520.5	478.4
15°	430.7	431.5	433.9	444.2	460.1	482.4	502.3	507.0	517.4	514.2	469.7
17.5°	406.1	406.9	410.1	418.8	431.5	457.8	484.8	492.7	507.8	510.2	460.1
20°	392.6	392.6	392.6	398.1	410.9	435.5	467.3	478.4	499.9	503.8	452.2
22.5°	388.6	388.6	387.0	388.6	396.6	417.2	449.8	463.3	490.3	501.5	442.7
25°	394.2	391.8	391.8	387.8	388.6	402.1	433.9	449.0	484.8	499.9	437.9
27.5°	404.5	403.7	400.5	397.4	392.6	395.8	420.4	435.5	479.2	502.3	433.9
30°	416.4	416.4	414.8	413.2	405.3	398.9	414.0	427.6	476.8	506.2	431.5
32.5°	429.9	429.1	433.1	434.7	425.2	413.2	415.6	428.3	478.4	518.2	433.1
35°	445.8	445.8	453.0	462.5	454.6	436.3	430.7	441.9	486.4	530.9	439.5
37.5°	463.3	464.1	476.8	490.3	484.8	468.9	459.3	463.3	503.1	554.7	453.8
40°	484.0	484.0	503.1	525.3	525.3	507.0	494.3	497.5	526.9	588.9	479.2
42.5°	506.2	508.6	535.6	562.7	570.6	553.9	540.4	544.4	565.0	633.4	516.6
45°	538.0	545.2	580.1	606.4	622.3	614.3	596.8	600.0	615.1	697.8	573.0
47.5°	594.4	600.8	631.0	657.2	677.1	681.1	673.1	671.5	677.9	773.3	644.5
50°	662.0	667.6	688.2	710.5	738.3	762.1	757.4	755.0	757.4	855.9	731.9
52.5°	728.7	726.4	751.0	762.9	801.9	854.3	875.0	875.0	862.3	942.5	817.8
55°	788.4	798.7	824.9	846.4	878.9	941.7	1011.7	1020.4	976.7	1028.4	889.3
57.5°	781.2	791.5	840.0	907.6	1003.7	1088.8	1157.1	1158.7	1095.1	1094.3	977.5
60°	697.8	698.5	763.7	866.2	1058.6	1300.9	1340.7	1332.7	1198.4	1186.5	1099.1
62.5°	491.1	488.0	572.2	702.5	976.7	1417.0	1618.8	1558.4	1370.1	1331.1	1212.7
65°	286.1	284.5	317.1	419.6	739.9	1335.1	1903.3	1912.9	1595.8	1405.0	1188.9
67.5°	192.3	193.9	209.0	259.1	431.5	1047.4	1955.8	2064.7	1721.3	1366.9	1081.6
70°	141.5	141.5	153.4	190.7	255.9	656.4	1708.6	1882.7	1746.0	1271.5	905.2
72.5°	100.9	100.9	117.6	154.2	209.0	338.5	1269.9	1492.5	1474.2	1055.4	626.2
75°	64.4	66.0	84.2	126.4	190.7	217.0	861.5	1081.6	1028.4	590.5	267.0
77.5°	24.6	27.8	45.3	93.0	166.9	180.4	491.1	681.9	542.8	206.6	71.5
80°	8.7	8.7	15.1	47.7	117.6	148.6	256.7	338.5	176.4	50.1	27.0
82.5°	1.6	1.6	5.6	19.9	58.0	103.3	149.4	166.9	69.1	16.7	15.9
85°	0.0	0.0	0.8	4.0	13.5	10.3	59.6	56.4	21.5	7.2	10.3
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	1.6	1.6	1.6	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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 CATALOG NUMBER: ISS-SA1A-830-U-SL3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	519.7	519.7	519.7	519.7	519.7	519.7	519.7	519.7	519.7	519.7	519.7
2.5°	514.2	507.8	489.5	476.8	459.3	441.9	430.7	422.0	418.0	412.5	414.8
5°	501.5	487.2	453.8	423.6	395.0	364.8	342.5	322.7	316.3	305.2	303.6
7.5°	482.4	462.5	413.2	365.6	319.5	281.3	247.2	220.9	197.1	186.8	193.1
10°	464.1	437.1	372.7	309.1	247.9	194.7	154.2	122.4	104.1	96.2	97.7
12.5°	446.6	412.5	330.6	255.1	180.4	120.0	87.4	70.7	65.2	64.4	62.8
15°	431.5	389.4	293.2	197.9	120.0	75.5	62.0	58.0	57.2	57.2	57.2
17.5°	414.8	365.6	252.7	145.4	78.7	58.8	54.8	54.0	53.2	53.2	53.2
20°	402.1	344.9	215.4	101.7	60.4	52.5	50.9	50.9	50.1	50.1	50.1
22.5°	388.6	323.4	178.8	74.7	51.7	48.5	46.9	46.1	46.1	45.3	45.3
25°	375.9	303.6	143.8	57.2	46.1	43.7	42.1	41.3	41.3	40.5	39.7
27.5°	368.0	287.7	112.8	48.5	41.3	39.7	38.1	36.6	35.0	34.2	34.2
30°	362.4	268.6	85.8	42.1	38.1	35.8	33.4	31.0	28.6	27.8	27.8
32.5°	354.4	253.5	66.0	38.1	34.2	31.8	28.6	26.2	23.8	22.3	22.3
35°	354.4	240.8	50.9	34.2	31.0	27.8	25.4	21.5	19.1	18.3	17.5
37.5°	360.0	226.5	42.1	31.8	28.6	25.4	22.3	18.3	15.9	15.1	15.1
40°	372.7	221.7	35.8	28.6	25.4	22.3	19.1	15.1	13.5	11.9	11.9
42.5°	398.9	223.3	31.8	27.0	23.0	19.9	15.9	12.7	11.1	10.3	10.3
45°	437.1	228.1	29.4	24.6	20.7	16.7	13.5	11.1	8.7	7.9	7.9
47.5°	490.3	243.2	26.2	22.3	18.3	14.3	11.1	8.7	7.2	6.4	6.4
50°	553.9	269.4	24.6	19.9	16.7	11.9	8.7	6.4	4.8	4.8	4.8
52.5°	628.6	295.6	22.3	18.3	14.3	10.3	7.2	4.8	4.0	3.2	3.2
55°	691.4	318.7	19.9	16.7	11.9	7.9	5.6	4.0	3.2	2.4	2.4
57.5°	773.3	352.1	16.7	14.3	9.5	6.4	4.0	3.2	1.6	1.6	1.6
60°	882.9	391.8	14.3	11.9	7.2	4.8	3.2	1.6	1.6	0.8	0.8
62.5°	929.8	360.0	12.7	9.5	5.6	3.2	2.4	1.6	0.8	0.8	0.8
65°	878.2	294.0	10.3	7.2	4.0	2.4	1.6	0.8	0.8	0.0	0.0
67.5°	757.4	217.0	8.7	4.8	3.2	1.6	0.8	0.0	0.0	0.0	0.0
70°	617.5	160.5	6.4	3.2	1.6	1.6	0.8	0.0	0.0	0.0	0.0
72.5°	427.6	97.0	4.8	2.4	1.6	0.8	0.8	0.0	0.0	0.0	0.0
75°	166.1	38.1	4.0	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	46.9	13.5	3.2	1.6	1.6	0.8	0.8	0.8	0.0	0.0	0.0
80°	19.1	7.2	2.4	1.6	1.6	1.6	0.8	0.8	0.0	0.0	0.0
82.5°	11.9	4.0	1.6	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0
85°	7.9	2.4	1.6	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.8
87.5°	1.6	1.6	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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.

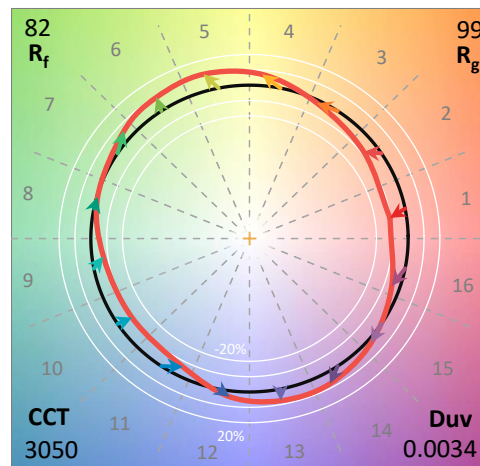
**Test Information**

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  
 CIE u': 0.2476  
 CIE v': 0.5251  
 Duv: 0.0034  
 CIE x: 0.4383  
 CIE y: 0.4131  
 CIE z: 0.1487  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 581  
 Purity: 55.55201  
 Rf: 81.5  
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



**Test Conditions**

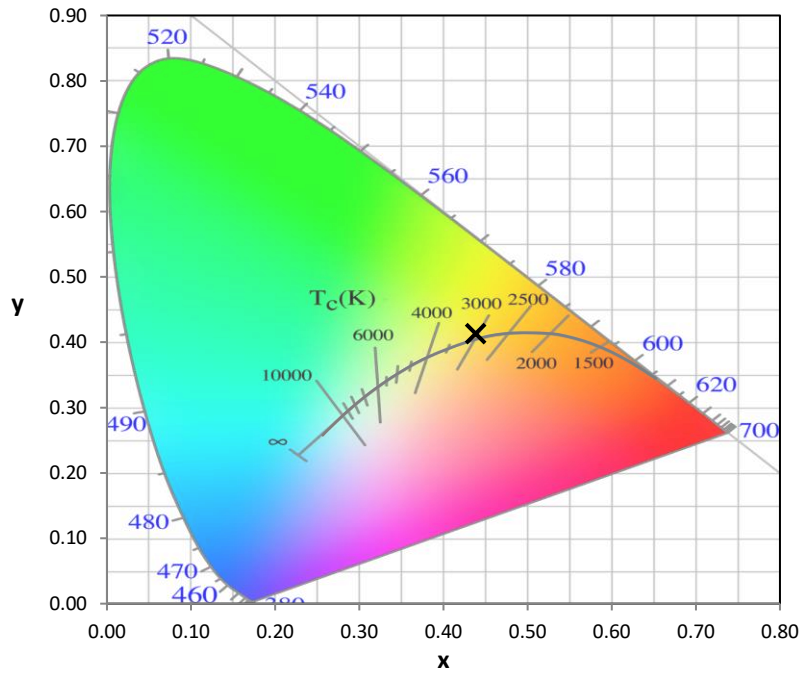
Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 24.2

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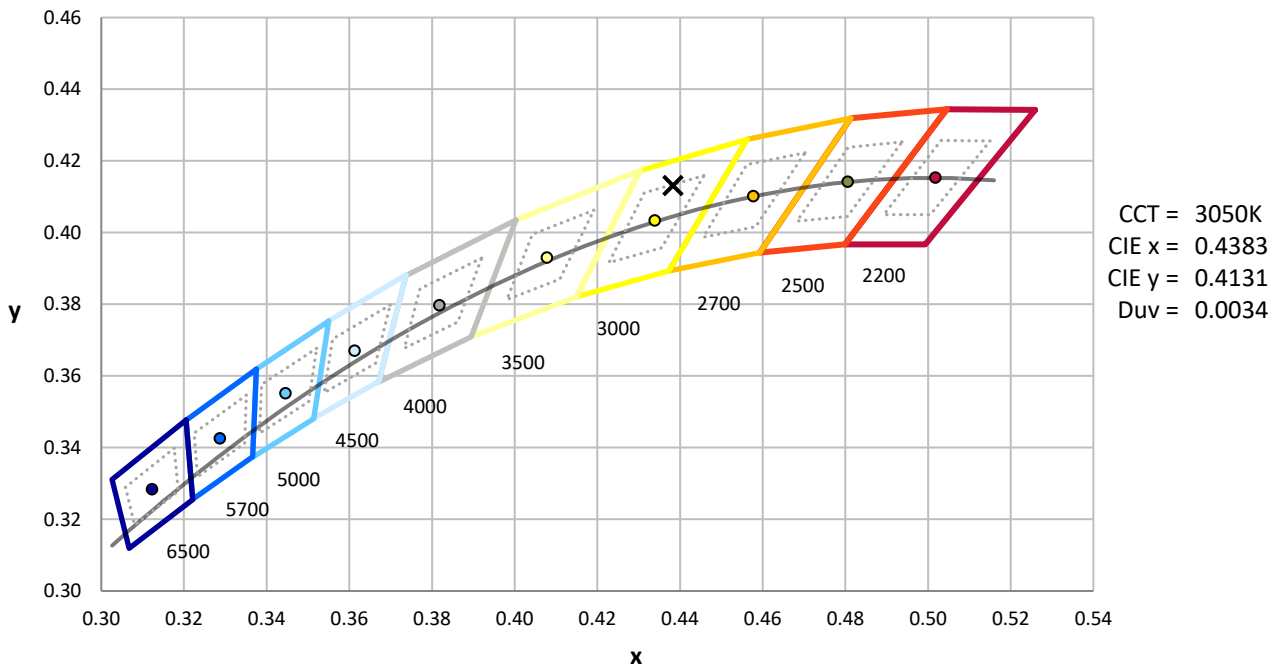
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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**CIE 1931 Chromaticity Diagram**



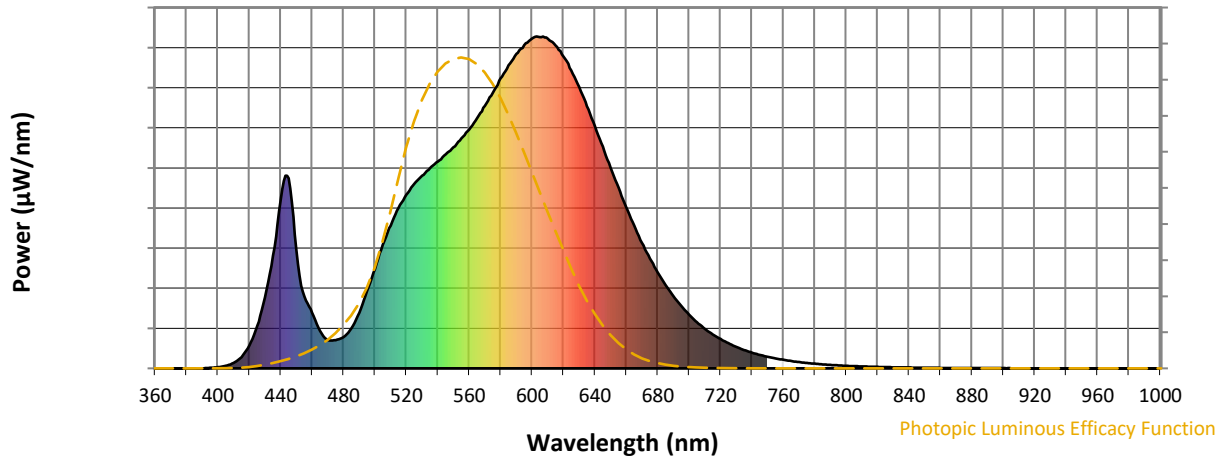
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 3000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

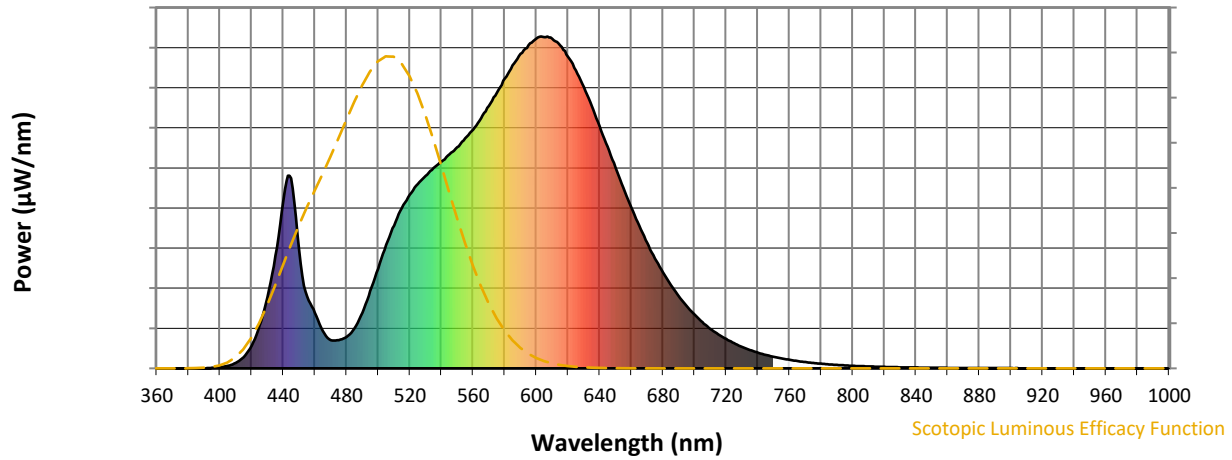


**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**



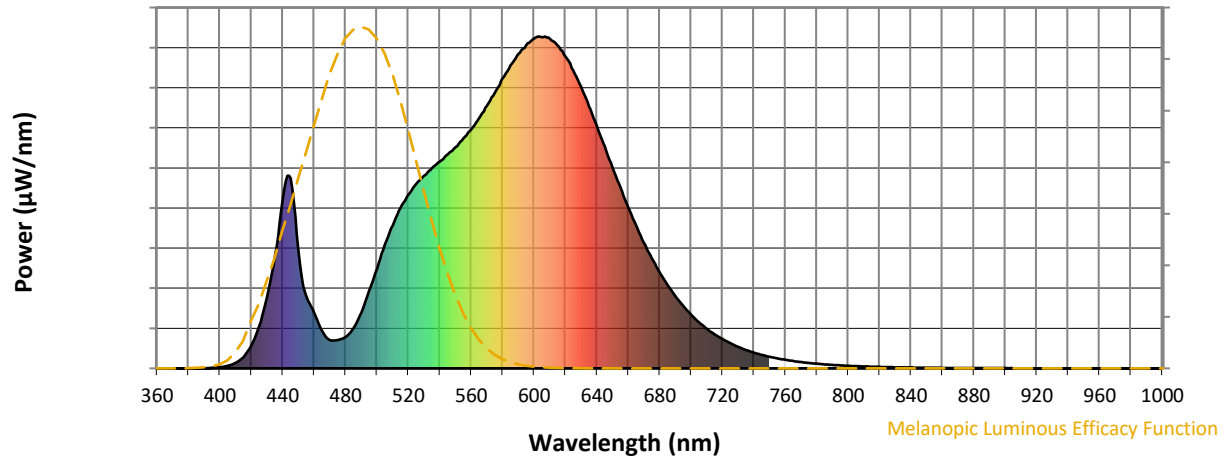
**Scotopic Lumens: NR**

**S/P: 1.27**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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			

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**Melanopic Flux vs. Wavelength**



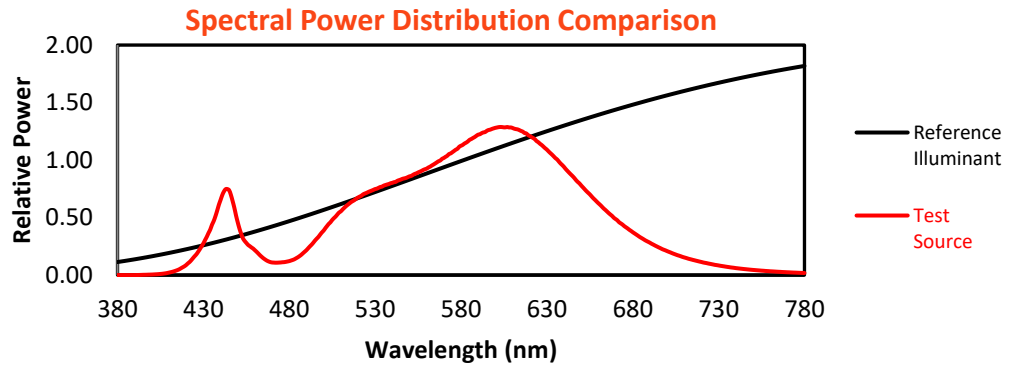
**Melanopic Lumens: NR**

**M/P: 2.32**

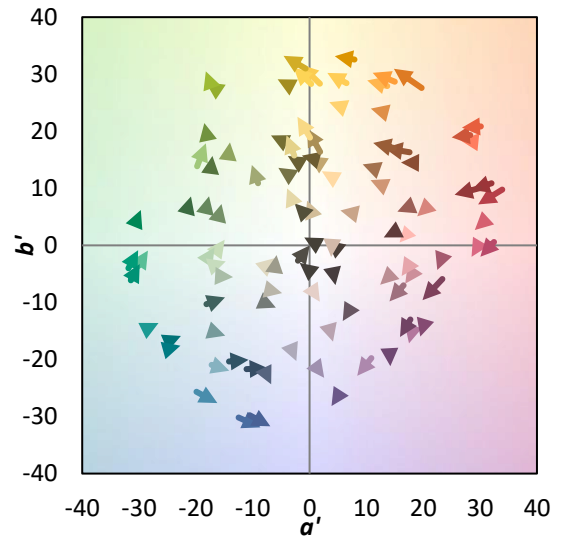
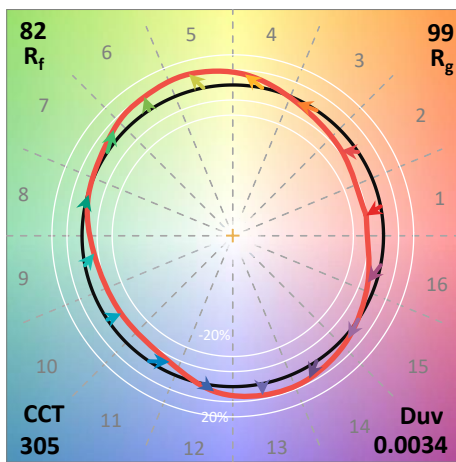
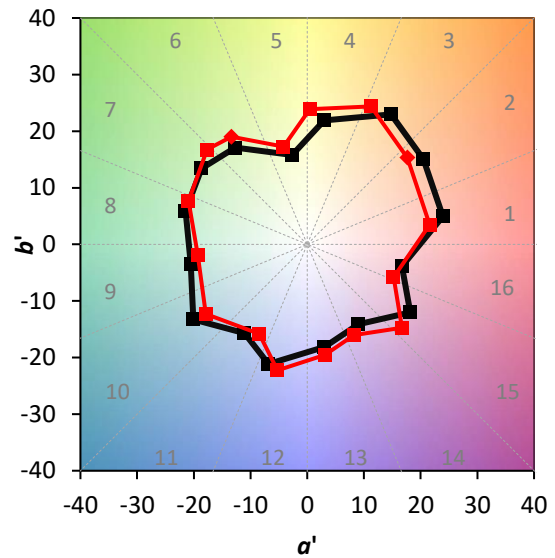
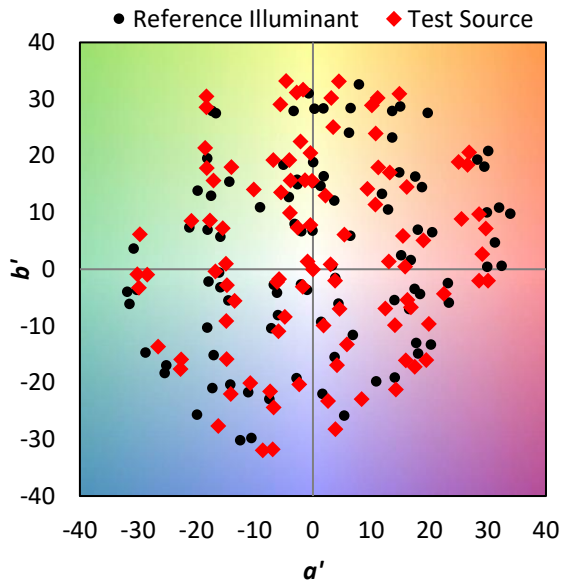
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	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			

**Summary**

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



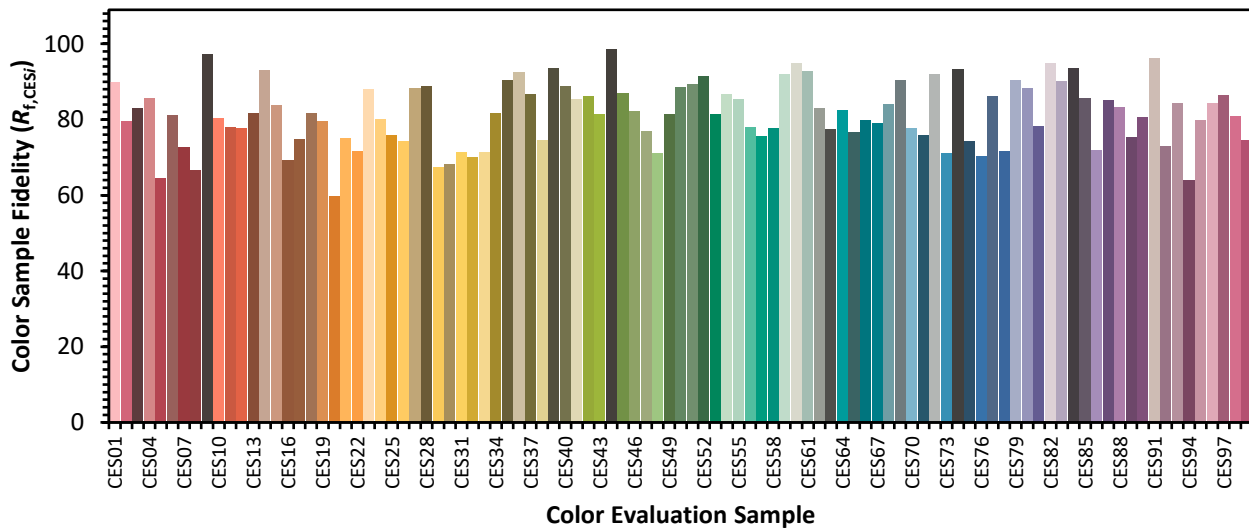
**Color Vector Graphics**



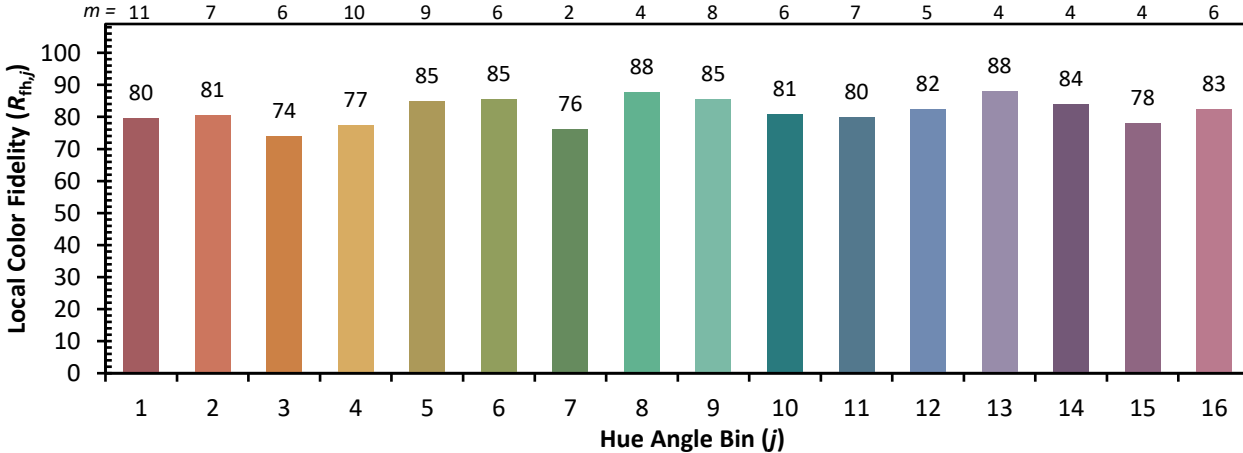
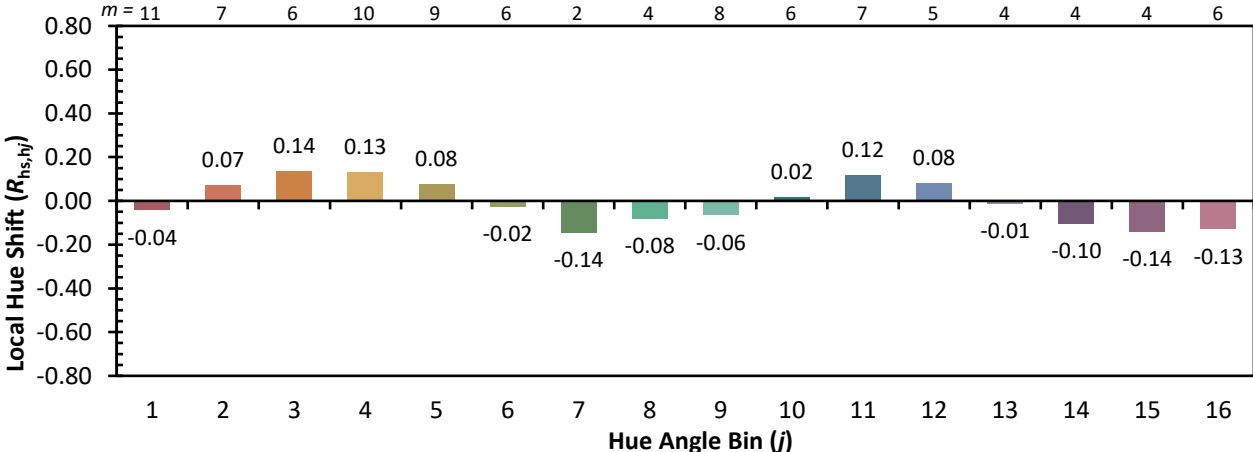
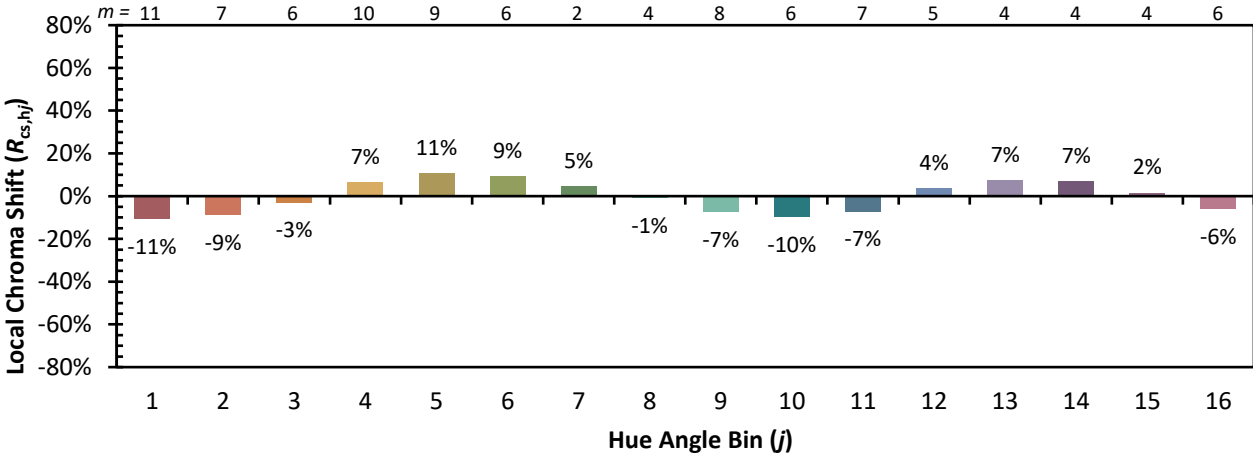


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

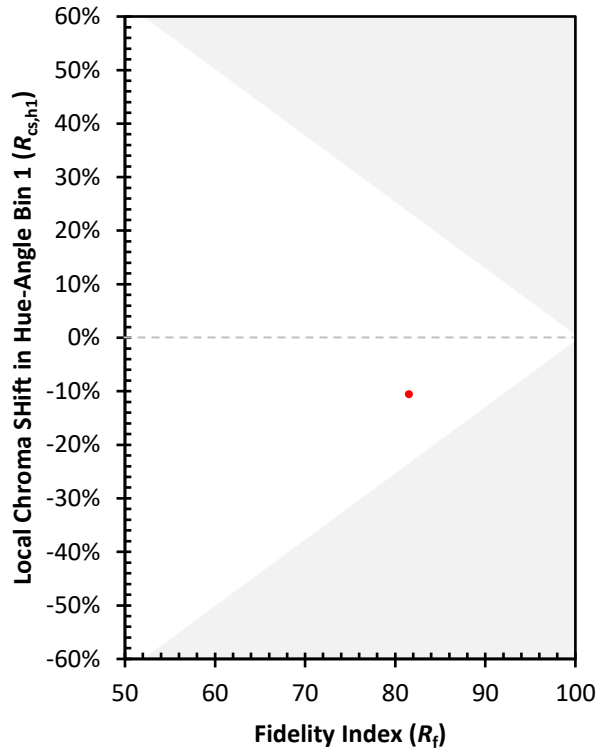
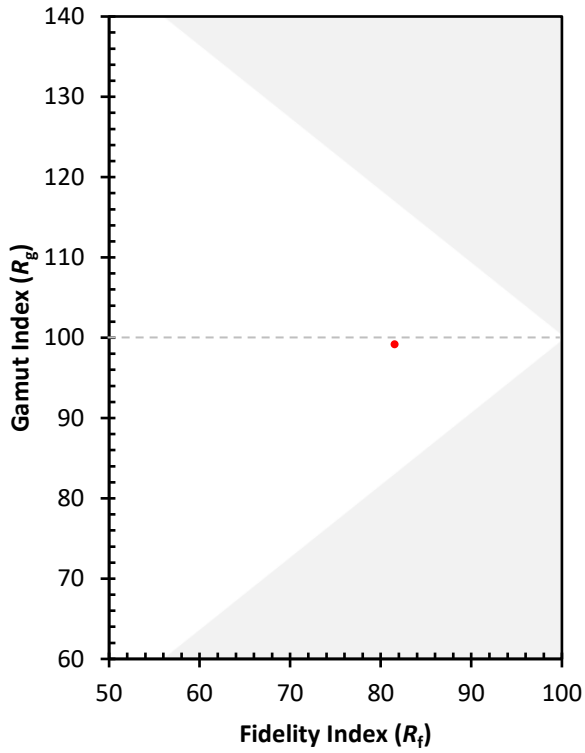
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)