

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



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: INVUE

Report Number: P1459751

Luminaire Tested: ABB-CX-740-X-U-A-GM-CBP

Issue Date: 5/26/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1459751  
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2509-539-34)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/27/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: INVUE  
Catalog Number: ABB-CX-740-X-U-A-GM-CBP  
Description: ARBOR OUTDOOR ARCHITECTURAL BOLLARD LUMINAIRE  
ASYMMETRIC OPTIC, GRAPHITE METALLIC PAINTED FINISH  
Light Source: 2200K CCT, 70 CRI LEDS  
Ballast/Driver: -

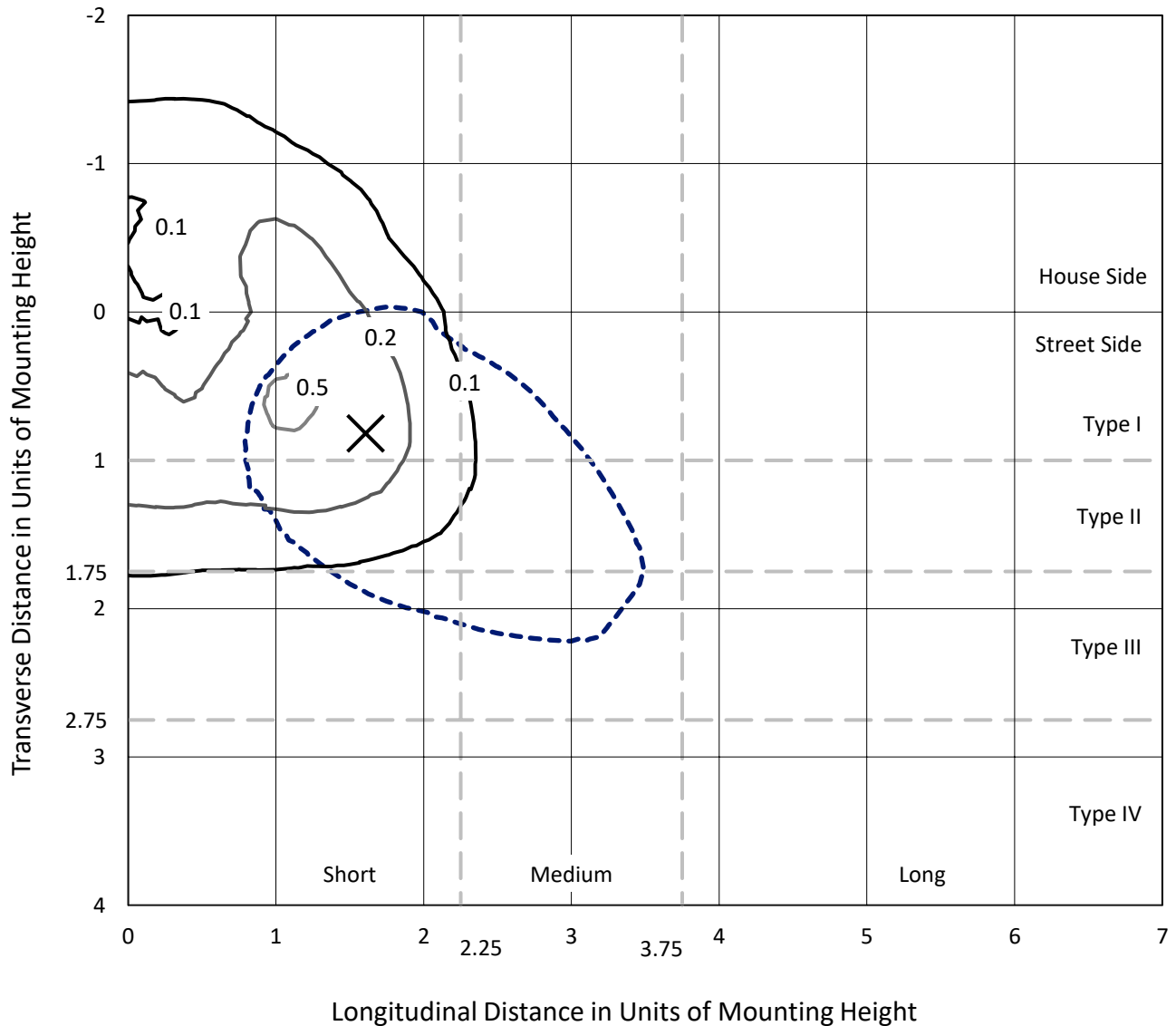
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 374.7 lumens  
Efficiency: N/A  
Efficacy: 42.1 lumens/watt  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G0  
  
Input Watts (W): 8.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: N/R  
Total Harmonic Distortion (THDi): N/R  
Frequency (hertz): 60  
Stabilization Time: HR  
Operation Time: 3 HR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

REPORT NUMBER: P1459751  
 CATALOG NUMBER: ABB-CX-740-X-U-A-GM-CBP

### Iso-Footcandle Lines of Horizontal Illumination

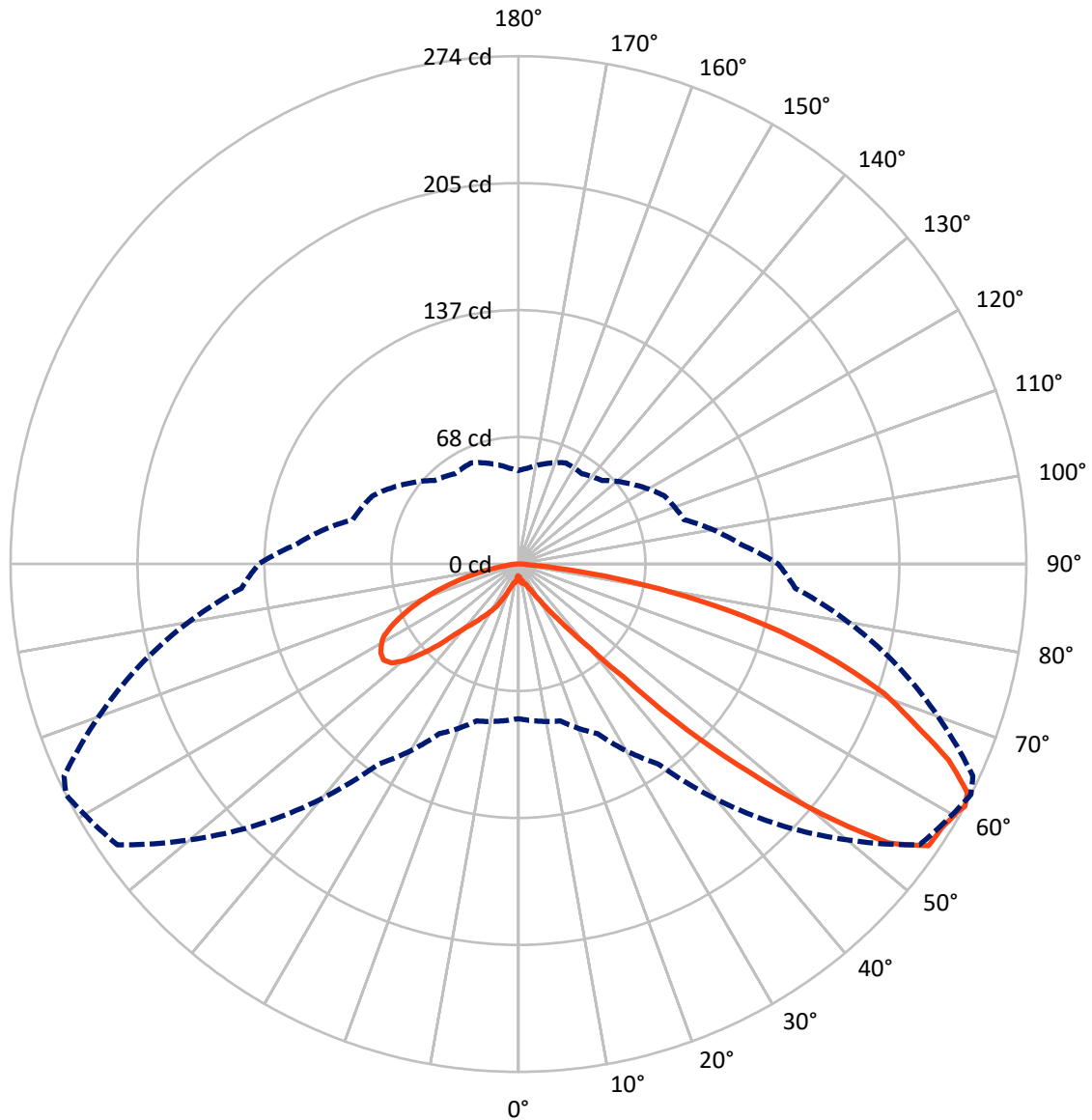
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 61-Deg Vertical

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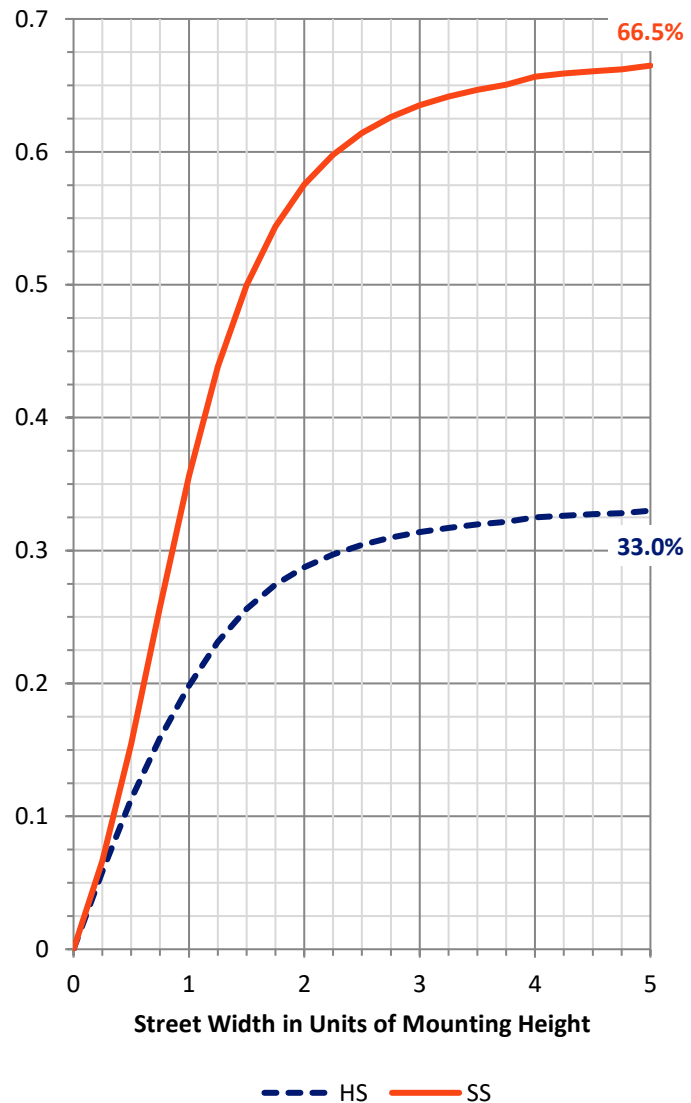
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	124.5	0.0	124.5
	% Fixture	33.2	0.0	33.2
<b>Street Side</b>	Lumens	250.2	0.0	250.2
	% Fixture	66.8	0.0	66.8
<b>Total</b>	Lumens	374.7	0.0	374.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	0.9	0.2
10°-20°	3.7	1.0
20°-30°	9.4	2.5
30°-40°	21.3	5.7
40°-50°	55.5	14.8
50°-60°	106.1	28.3
60°-70°	107.1	28.6
70°-80°	62.0	16.5
80°-90°	8.7	2.3
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°	374.7	100.0
0°-180°	374.7	100.0



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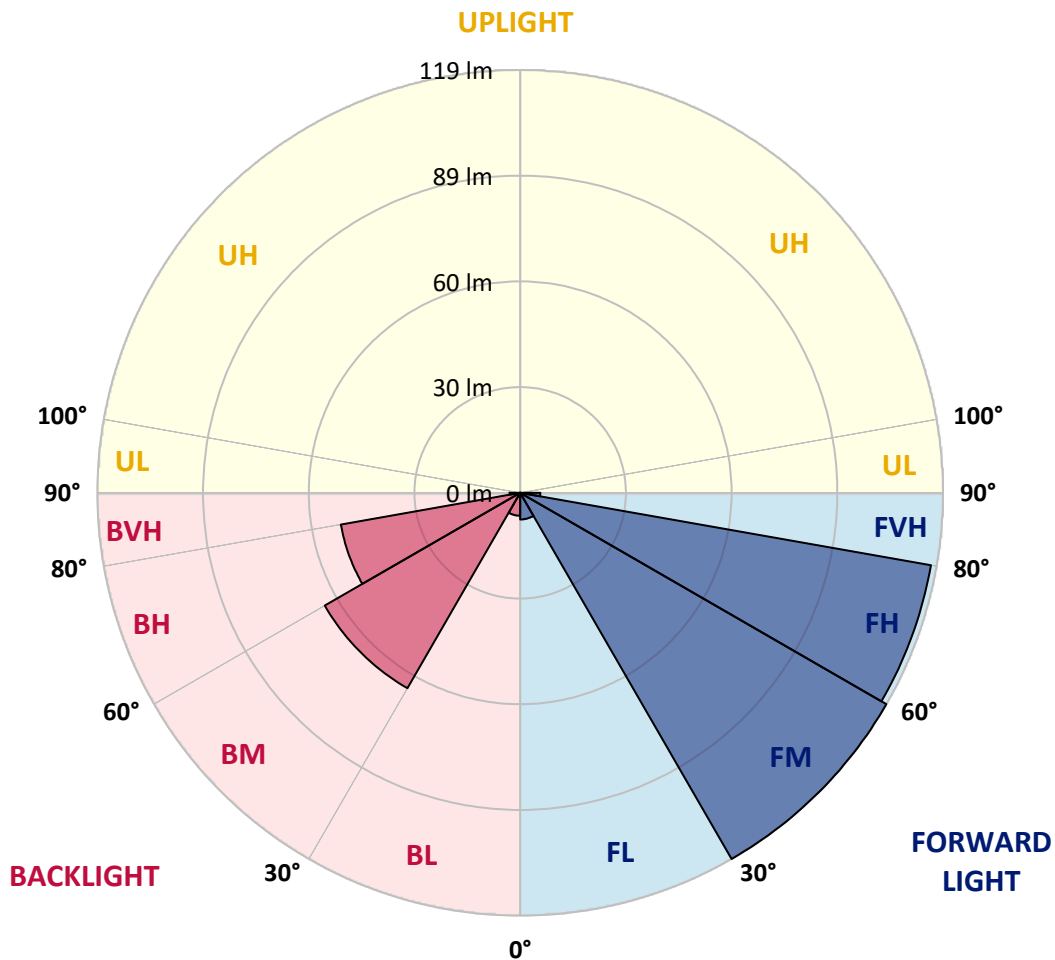
CATALOG NUMBER: ABB-CX-740-X-U-A-GM-CBP

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	7.5	2.0			
FM	(30°-60°)	119.3	31.8			
FH	(60°-80°)	117.7	31.4			G0/660
FVH	(80°-90°)	5.7	1.5			G0/10
BL	(0°-30°)	6.5	1.7	B0/110		
BM	(30°-60°)	63.7	17.0	B0/220		
BH	(60°-80°)	51.4	13.7	B0/110		G0/110
BVH	(80°-90°)	3.0	0.8			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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
2.5°	11.2	11.9	10.5	10.5	9.8	9.1	8.4	7.7	7.7	7.0	7.0
5°	14.7	14.0	12.6	10.5	9.8	8.4	7.7	7.0	7.0	7.0	6.3
7.5°	16.1	14.7	14.7	12.6	11.2	11.2	11.2	9.8	9.1	8.4	8.4
10°	15.4	15.4	15.4	14.0	13.3	12.6	11.2	10.5	9.8	9.1	9.8
12.5°	14.0	14.0	16.1	15.4	13.3	12.6	11.2	9.1	9.1	9.1	8.4
15°	14.7	15.4	17.5	17.5	16.1	13.3	11.9	10.5	10.5	9.8	9.1
17.5°	18.2	18.2	18.2	18.2	18.2	15.4	11.9	11.2	10.5	10.5	10.5
20°	21.0	21.0	20.3	20.3	20.3	16.1	13.3	11.9	11.9	11.9	11.2
22.5°	25.2	24.5	25.9	23.1	21.7	17.5	14.7	14.0	14.0	13.3	12.6
25°	30.8	32.2	28.0	24.5	23.1	18.9	16.1	15.4	15.4	16.1	14.7
27.5°	37.8	37.8	31.5	28.0	25.2	21.0	19.6	18.9	18.2	18.9	18.2
30°	41.3	42.0	36.4	30.8	28.0	25.2	23.1	22.4	22.4	23.1	21.7
32.5°	45.5	46.2	39.9	34.3	30.8	29.4	29.4	28.7	28.0	27.3	25.2
35°	49.7	50.4	45.5	37.8	35.7	35.7	36.4	35.7	35.0	32.9	30.1
37.5°	53.9	54.6	49.7	42.7	39.9	42.7	45.5	46.2	44.8	41.3	36.4
40°	56.7	58.8	53.9	46.9	46.2	51.8	58.1	60.2	58.8	52.5	43.4
42.5°	60.9	63.0	60.2	53.2	53.9	65.1	79.9	84.1	82.0	70.7	56.0
45°	70.7	72.2	71.4	66.5	68.6	92.5	121.9	127.5	123.3	100.9	76.4
47.5°	77.1	77.1	79.2	75.0	82.7	121.2	159.7	168.1	163.9	130.3	96.7
50°	85.5	85.5	90.4	89.7	103.0	155.5	201.7	212.2	208.7	166.0	119.8
52.5°	88.3	90.4	96.0	98.8	119.8	179.3	239.6	250.1	247.3	191.2	137.3
55°	89.7	91.8	97.4	102.3	129.6	195.4	262.7	268.3	265.5	209.4	145.7
57.5°	89.0	91.1	95.3	101.6	131.0	201.0	262.7	269.0	266.2	215.1	148.5
60°	86.2	86.9	89.7	100.9	131.7	200.3	262.7	271.8	269.7	213.6	150.6
61°	83.4	84.8	87.6	100.9	131.7	198.9	264.1	273.9	270.4	211.5	149.9
62.5°	79.9	81.3	83.4	100.2	129.6	194.0	262.7	271.8	268.3	206.6	145.7
65°	72.9	72.9	73.6	96.7	121.2	179.3	248.0	255.0	248.7	192.6	135.2
67.5°	63.0	62.3	64.4	91.1	112.1	162.5	226.3	230.5	226.3	174.4	124.0
70°	51.8	51.8	54.6	82.7	101.6	142.2	204.5	209.4	205.2	152.7	112.8
72.5°	41.3	39.9	44.8	70.0	88.3	120.5	176.5	179.3	176.5	129.6	96.7
75°	30.1	28.0	35.7	56.7	72.2	95.3	142.9	146.4	141.5	101.6	78.5
77.5°	20.3	18.2	25.2	39.9	52.5	68.6	106.5	108.6	103.7	72.9	57.4
80°	11.9	11.2	16.1	23.1	31.5	42.7	67.2	70.0	65.1	45.5	35.0
82.5°	7.7	7.0	8.4	9.1	11.2	18.9	30.1	31.5	27.3	17.5	14.0
85°	4.9	4.2	4.2	3.5	4.2	4.2	4.2	5.6	4.9	4.2	3.5
87.5°	3.5	3.5	2.8	2.8	2.8	2.8	3.5	3.5	3.5	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1459751

CATALOG NUMBER: ABB-CX-740-X-U-A-GM-CBP

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
2.5°	6.3	6.3	6.3	6.3	6.3	7.0	6.3	7.0	7.0	7.0	7.0
5°	6.3	6.3	7.0	7.0	7.7	7.7	7.7	7.7	7.0	7.0	6.3
7.5°	8.4	8.4	8.4	9.1	9.8	9.1	8.4	9.1	9.1	8.4	8.4
10°	9.1	9.1	9.1	9.8	11.2	11.2	10.5	10.5	10.5	9.1	9.1
12.5°	9.1	9.1	9.8	9.8	10.5	12.6	11.9	12.6	11.9	10.5	10.5
15°	9.8	9.8	10.5	10.5	12.6	14.0	13.3	13.3	12.6	10.5	10.5
17.5°	11.2	11.2	11.9	11.9	14.0	15.4	16.1	14.0	13.3	11.2	11.2
20°	11.2	11.9	14.0	14.0	16.1	16.8	18.2	16.1	14.0	12.6	12.6
22.5°	12.6	12.6	14.7	17.5	18.9	18.9	19.6	16.8	14.7	13.3	13.3
25°	14.7	14.7	17.5	21.0	21.7	20.3	21.0	18.2	15.4	13.3	13.3
27.5°	17.5	18.9	21.7	25.9	23.8	22.4	21.7	19.6	16.1	14.7	14.0
30°	22.4	21.7	25.2	28.7	27.3	24.5	23.8	21.0	16.8	14.7	14.7
32.5°	26.6	26.6	29.4	32.2	30.8	27.3	25.9	22.4	18.2	15.4	15.4
35°	31.5	32.2	33.6	35.7	33.6	29.4	28.0	24.5	19.6	16.8	16.8
37.5°	37.1	37.8	38.5	40.6	37.1	32.9	30.8	26.6	21.7	18.9	19.6
40°	43.4	44.8	44.8	44.8	41.3	36.4	34.3	29.4	25.2	23.1	23.8
42.5°	55.3	56.0	54.6	51.8	46.9	41.3	39.9	35.7	30.8	28.0	30.1
45°	72.9	71.4	68.6	62.3	56.0	49.0	46.9	42.7	37.8	35.0	37.1
47.5°	89.7	85.5	81.3	72.2	64.4	56.7	53.9	51.1	45.5	42.0	44.1
50°	111.4	101.6	93.2	82.0	72.2	64.4	60.2	58.1	51.8	48.3	48.3
52.5°	126.8	112.1	99.5	89.0	77.1	67.9	63.7	62.3	56.0	51.8	51.1
55°	132.4	117.0	101.6	91.8	79.2	68.6	64.4	63.0	57.4	53.2	52.5
57.5°	135.9	119.1	98.8	91.1	77.8	67.2	62.3	62.3	57.4	53.2	52.5
60°	140.1	121.2	94.6	88.3	75.7	65.1	60.9	60.9	56.7	52.5	51.8
61°	140.1	120.5	92.5	86.9	75.0	63.7	59.5	60.2	56.0	51.8	50.4
62.5°	138.0	118.4	88.3	84.1	72.2	61.6	58.1	58.8	54.6	50.4	49.7
65°	131.0	112.8	82.0	76.4	65.8	56.0	53.9	54.6	51.1	46.9	46.2
67.5°	121.9	105.1	73.6	67.2	58.1	50.4	49.0	49.0	46.9	42.7	42.0
70°	108.6	94.6	64.4	57.4	50.4	44.1	43.4	44.1	41.3	38.5	37.1
72.5°	91.8	80.6	54.6	46.2	41.3	37.1	37.8	37.1	35.7	32.9	31.5
75°	71.4	64.4	43.4	35.0	31.5	30.1	30.1	30.1	28.7	27.3	25.9
77.5°	49.7	45.5	30.1	24.5	22.4	22.4	22.4	21.7	21.7	20.3	18.9
80°	28.0	25.9	16.8	14.7	14.0	14.7	14.7	13.3	14.0	14.0	12.6
82.5°	9.1	9.1	7.7	7.7	7.7	7.7	7.0	6.3	7.7	8.4	7.0
85°	2.8	3.5	3.5	4.2	4.2	3.5	3.5	3.5	4.2	4.9	4.2
87.5°	2.1	2.1	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.5	3.5
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

Invue

Report Number: SP1-2509-539-9

Test Date: 04/14/2026

Luminaire Tested: Luxscape Bollard

Data in this report applies to families of products including ;Luxscape

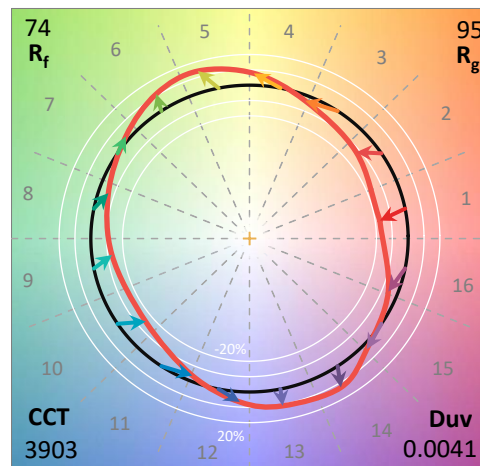
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2509-539-9  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 04/15/2026  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Invue  
 Catalog Number: **Luxscape Bollard**  
 Description: ARB-C1-740-LED-XX-Dx-S-GM-SPECULAR REFLECTOR

**Spectral Parameters**

CCT (K): 3903  
 CIE u': 0.2247  
 CIE v': 0.5085  
 Duv: 0.0041  
 CIE x: 0.3880  
 CIE y: 0.3902  
 CIE z: 0.2218  
 Peak Wavelength (nm): 442  
 Dominant Wavelength (nm): 577  
 Purity: 33.55395  
 Rf: 74.1  
 Rg: 95.4

CRI (Ra):	71.4		
R1:	67.8	R9:	-38.3
R2:	77.2	R10:	48.5
R3:	87.2	R11:	70.3
R4:	72.2	R12:	48.8
R5:	68.6	R13:	68.9
R6:	70.0	R14:	92.8
R7:	79.2	R15:	58.3
R8:	49.3		



**Test Conditions**

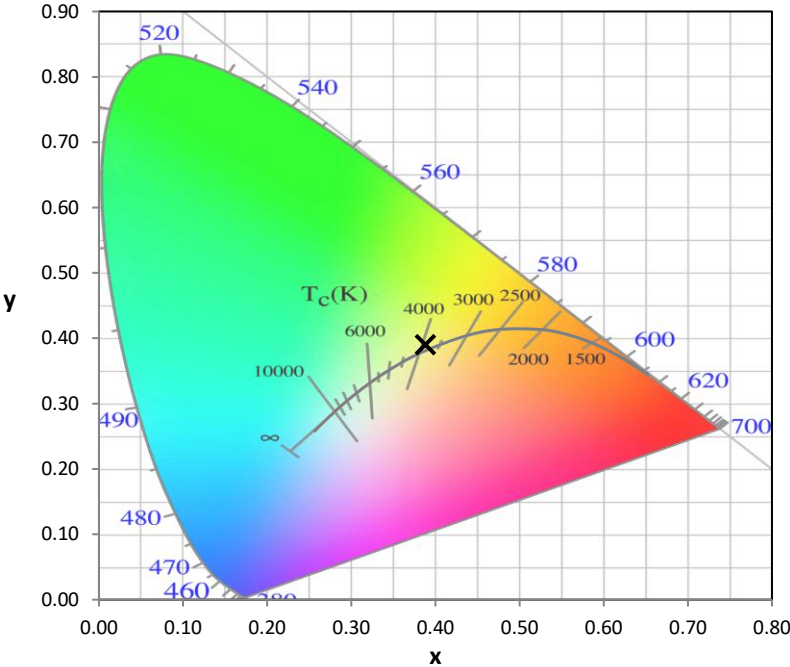
Stabilization Time: 24M  
 Operation Time: 1H 24M  
 Sphere Temperature (°C): 25.1

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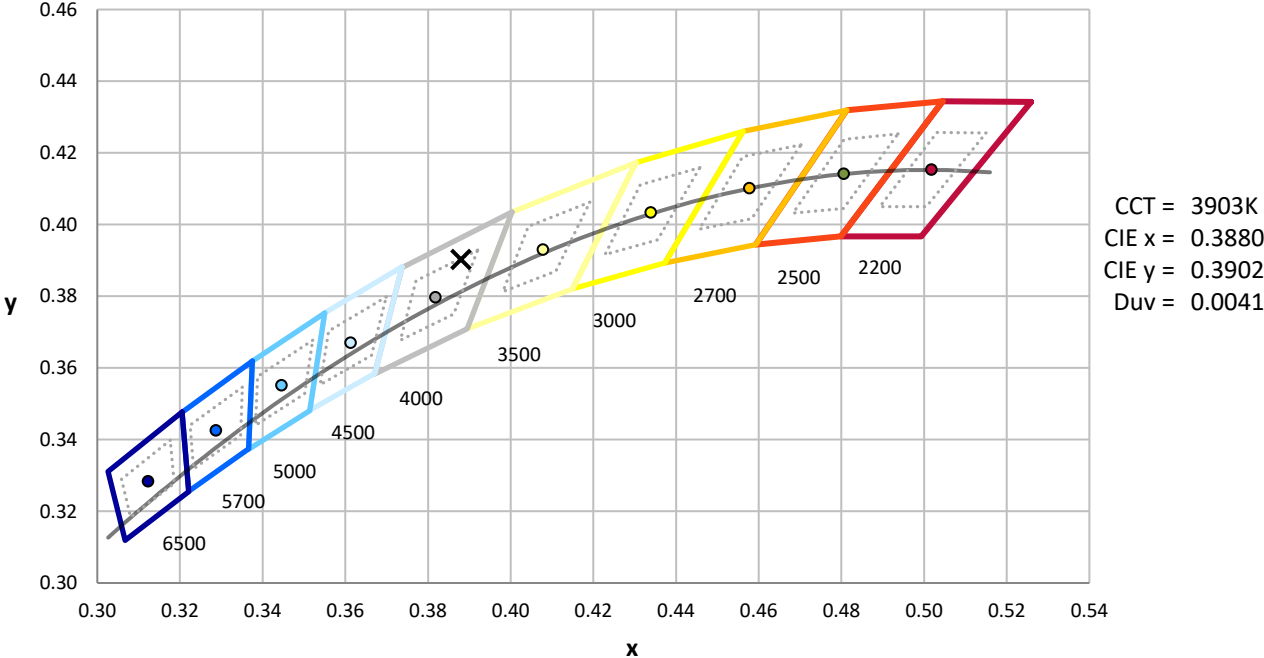
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	10/21/2025	10/21/2026
Sphere Thermometer	ONSET IN0085	10/21/2025	10/21/2026
Room Thermometer	ONSET IN0046	10/21/2025	10/21/2026

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CIE 1931 Chromaticity Diagram



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

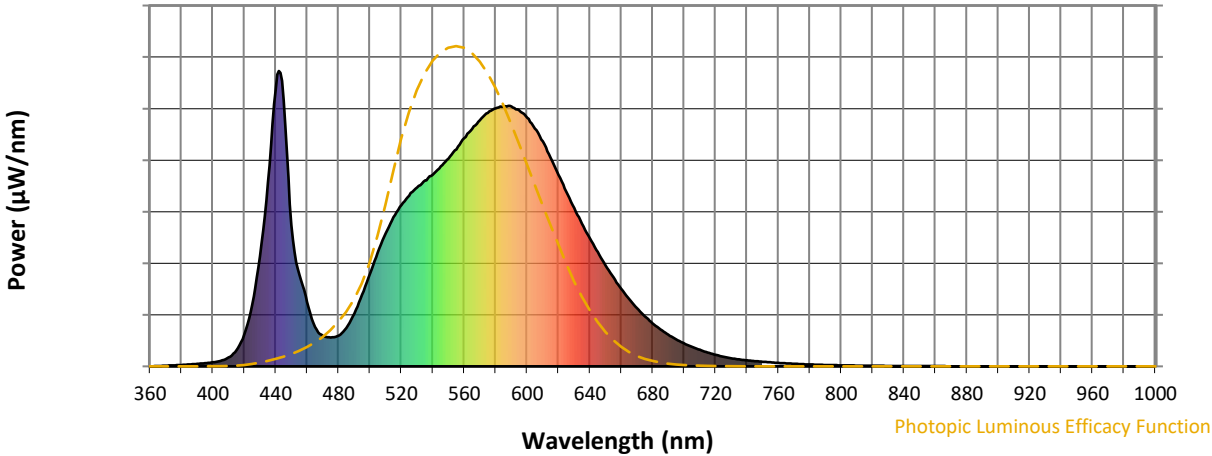


CCT = 3903K  
 CIE x = 0.3880  
 CIE y = 0.3902  
 Duv = 0.0041

Point lies inside the ANSI 4000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

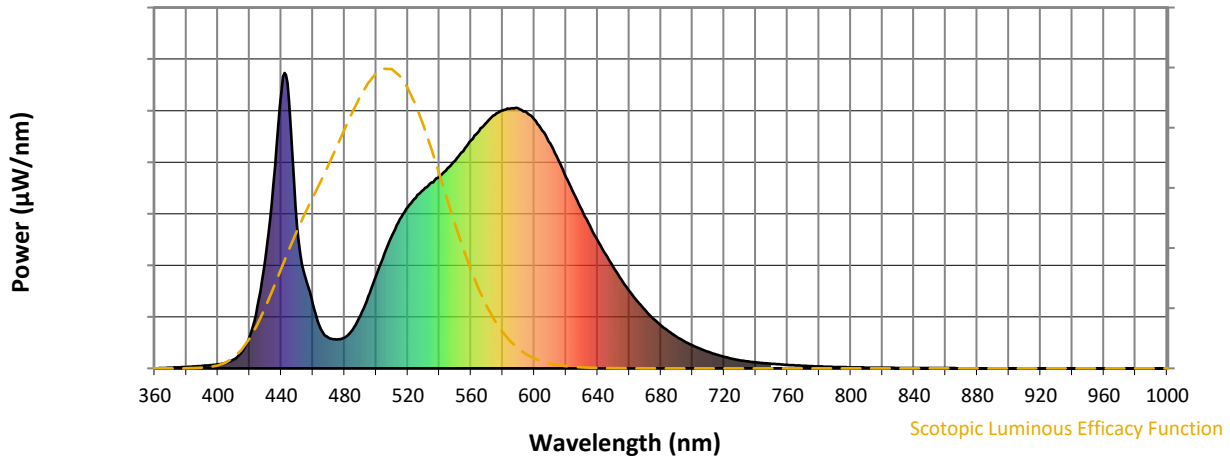


**Photopic Lumens: NR**

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	179	NR	620	648	NR	750	16	NR	880	0	NR
365	1	NR	495	243	NR	625	592	NR	755	14	NR	885	0	NR
370	2	NR	500	314	NR	630	536	NR	760	12	NR	890	0	NR
375	3	NR	505	386	NR	635	483	NR	765	10	NR	895	0	NR
380	5	NR	510	450	NR	640	433	NR	770	9	NR	900	0	NR
385	7	NR	515	505	NR	645	387	NR	775	8	NR	905	0	NR
390	8	NR	520	546	NR	650	341	NR	780	6	NR	910	0	NR
395	11	NR	525	577	NR	655	301	NR	785	5	NR	915	0	NR
400	14	NR	530	605	NR	660	262	NR	790	5	NR	920	0	NR
405	19	NR	535	630	NR	665	227	NR	795	4	NR	925	0	NR
410	30	NR	540	649	NR	670	197	NR	800	3	NR	930	0	NR
415	55	NR	545	677	NR	675	169	NR	805	3	NR	935	0	NR
420	109	NR	550	703	NR	680	146	NR	810	3	NR	940	0	NR
425	210	NR	555	735	NR	685	125	NR	815	2	NR	945	0	NR
430	373	NR	560	772	NR	690	107	NR	820	2	NR	950	0	NR
435	624	NR	565	804	NR	695	91	NR	825	2	NR	955	0	NR
440	936	NR	570	833	NR	700	78	NR	830	2	NR	960	0	NR
445	901	NR	575	858	NR	705	66	NR	835	1	NR	965	0	NR
450	478	NR	580	873	NR	710	56	NR	840	1	NR	970	0	NR
455	311	NR	585	879	NR	715	47	NR	845	1	NR	975	0	NR
460	218	NR	590	880	NR	720	39	NR	850	1	NR	980	0	NR
465	134	NR	595	867	NR	725	33	NR	855	1	NR	985	0	NR
470	103	NR	600	842	NR	730	27	NR	860	1	NR	990	0	NR
475	98	NR	605	806	NR	735	24	NR	865	1	NR	995	0	NR
480	104	NR	610	762	NR	740	20	NR	870	0	NR	1000	0	NR
485	130	NR	615	707	NR	745	18	NR	875	0	NR			

REPORT NUMBER: SP1-2509-539-9

**Scotopic Flux vs. Wavelength**



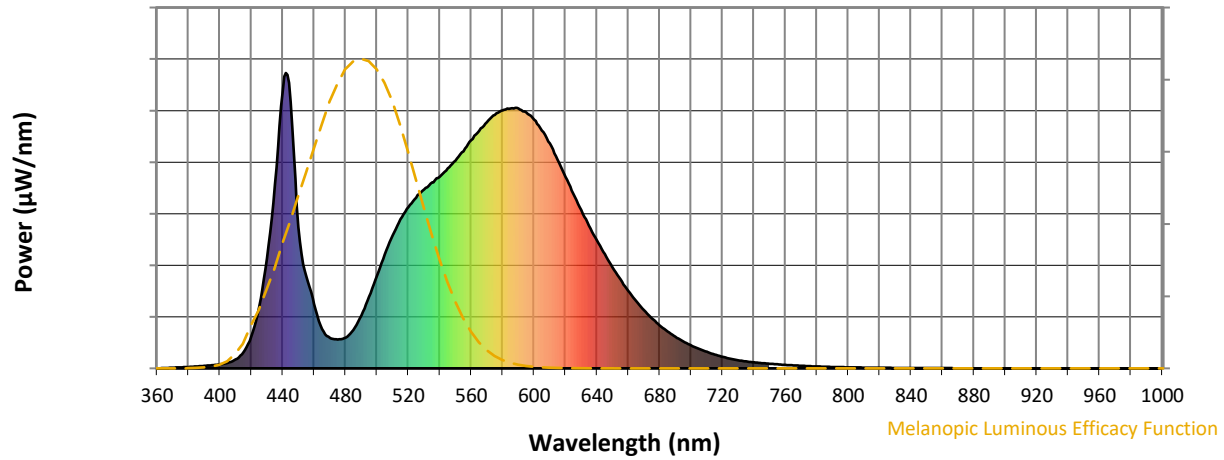
**Scotopic Lumens: NR**

**S/P: 1.48**

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	179	NR	620	648	NR	750	16	NR	880	0	NR
365	1	NR	495	243	NR	625	592	NR	755	14	NR	885	0	NR
370	2	NR	500	314	NR	630	536	NR	760	12	NR	890	0	NR
375	3	NR	505	386	NR	635	483	NR	765	10	NR	895	0	NR
380	5	NR	510	450	NR	640	433	NR	770	9	NR	900	0	NR
385	7	NR	515	505	NR	645	387	NR	775	8	NR	905	0	NR
390	8	NR	520	546	NR	650	341	NR	780	6	NR	910	0	NR
395	11	NR	525	577	NR	655	301	NR	785	5	NR	915	0	NR
400	14	NR	530	605	NR	660	262	NR	790	5	NR	920	0	NR
405	19	NR	535	630	NR	665	227	NR	795	4	NR	925	0	NR
410	30	NR	540	649	NR	670	197	NR	800	3	NR	930	0	NR
415	55	NR	545	677	NR	675	169	NR	805	3	NR	935	0	NR
420	109	NR	550	703	NR	680	146	NR	810	3	NR	940	0	NR
425	210	NR	555	735	NR	685	125	NR	815	2	NR	945	0	NR
430	373	NR	560	772	NR	690	107	NR	820	2	NR	950	0	NR
435	624	NR	565	804	NR	695	91	NR	825	2	NR	955	0	NR
440	936	NR	570	833	NR	700	78	NR	830	2	NR	960	0	NR
445	901	NR	575	858	NR	705	66	NR	835	1	NR	965	0	NR
450	478	NR	580	873	NR	710	56	NR	840	1	NR	970	0	NR
455	311	NR	585	879	NR	715	47	NR	845	1	NR	975	0	NR
460	218	NR	590	880	NR	720	39	NR	850	1	NR	980	0	NR
465	134	NR	595	867	NR	725	33	NR	855	1	NR	985	0	NR
470	103	NR	600	842	NR	730	27	NR	860	1	NR	990	0	NR
475	98	NR	605	806	NR	735	24	NR	865	1	NR	995	0	NR
480	104	NR	610	762	NR	740	20	NR	870	0	NR	1000	0	NR
485	130	NR	615	707	NR	745	18	NR	875	0	NR			

REPORT NUMBER: SP1-2509-539-9

Melanopic Flux vs. Wavelength



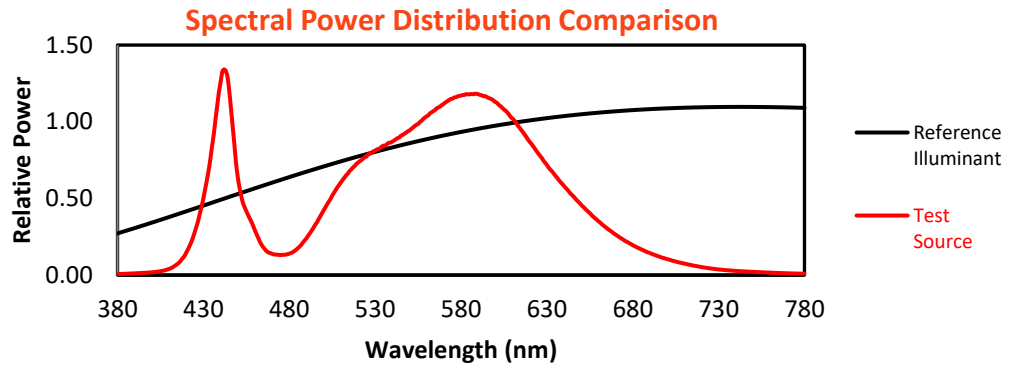
Melanopic Lumens: NR

M/P: 2.81

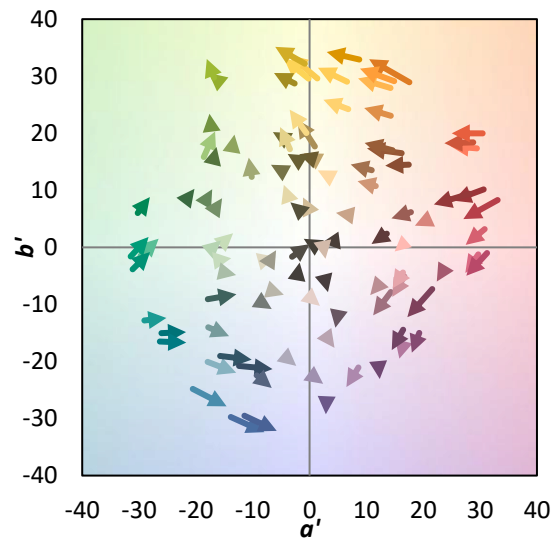
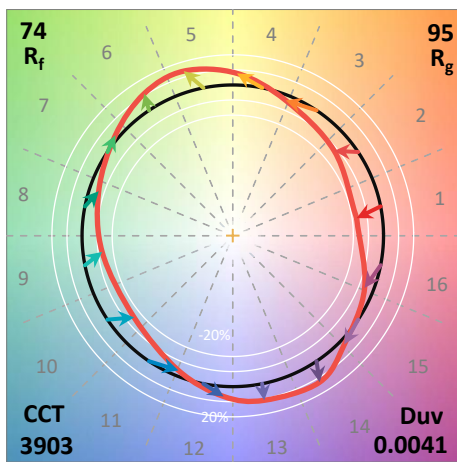
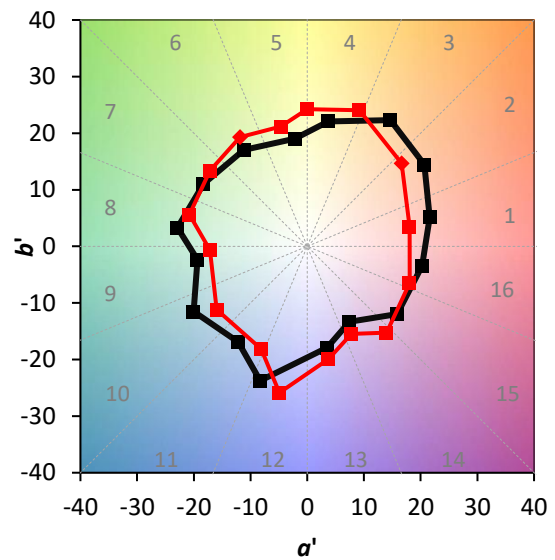
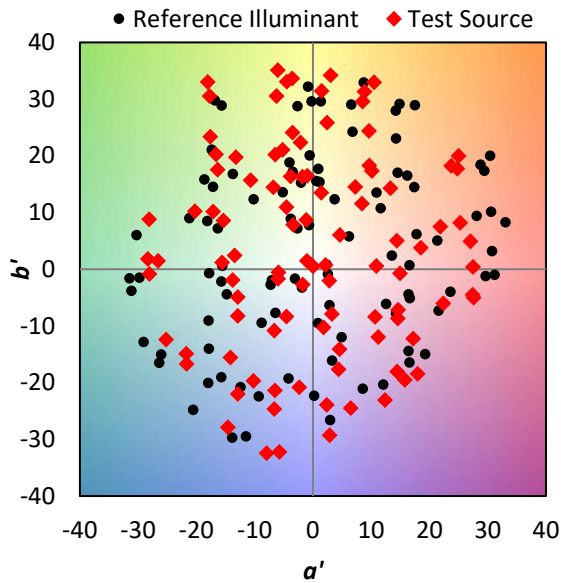
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	179	NR	620	648	NR	750	16	NR	880	0	NR
365	1	NR	495	243	NR	625	592	NR	755	14	NR	885	0	NR
370	2	NR	500	314	NR	630	536	NR	760	12	NR	890	0	NR
375	3	NR	505	386	NR	635	483	NR	765	10	NR	895	0	NR
380	5	NR	510	450	NR	640	433	NR	770	9	NR	900	0	NR
385	7	NR	515	505	NR	645	387	NR	775	8	NR	905	0	NR
390	8	NR	520	546	NR	650	341	NR	780	6	NR	910	0	NR
395	11	NR	525	577	NR	655	301	NR	785	5	NR	915	0	NR
400	14	NR	530	605	NR	660	262	NR	790	5	NR	920	0	NR
405	19	NR	535	630	NR	665	227	NR	795	4	NR	925	0	NR
410	30	NR	540	649	NR	670	197	NR	800	3	NR	930	0	NR
415	55	NR	545	677	NR	675	169	NR	805	3	NR	935	0	NR
420	109	NR	550	703	NR	680	146	NR	810	3	NR	940	0	NR
425	210	NR	555	735	NR	685	125	NR	815	2	NR	945	0	NR
430	373	NR	560	772	NR	690	107	NR	820	2	NR	950	0	NR
435	624	NR	565	804	NR	695	91	NR	825	2	NR	955	0	NR
440	936	NR	570	833	NR	700	78	NR	830	2	NR	960	0	NR
445	901	NR	575	858	NR	705	66	NR	835	1	NR	965	0	NR
450	478	NR	580	873	NR	710	56	NR	840	1	NR	970	0	NR
455	311	NR	585	879	NR	715	47	NR	845	1	NR	975	0	NR
460	218	NR	590	880	NR	720	39	NR	850	1	NR	980	0	NR
465	134	NR	595	867	NR	725	33	NR	855	1	NR	985	0	NR
470	103	NR	600	842	NR	730	27	NR	860	1	NR	990	0	NR
475	98	NR	605	806	NR	735	24	NR	865	1	NR	995	0	NR
480	104	NR	610	762	NR	740	20	NR	870	0	NR	1000	0	NR
485	130	NR	615	707	NR	745	18	NR	875	0	NR			

**Summary**

$R_f = 74.1$   
 $R_g = 95.4$   
 CIE  $R_a = 71.4$   
 $R_g = -38.3$

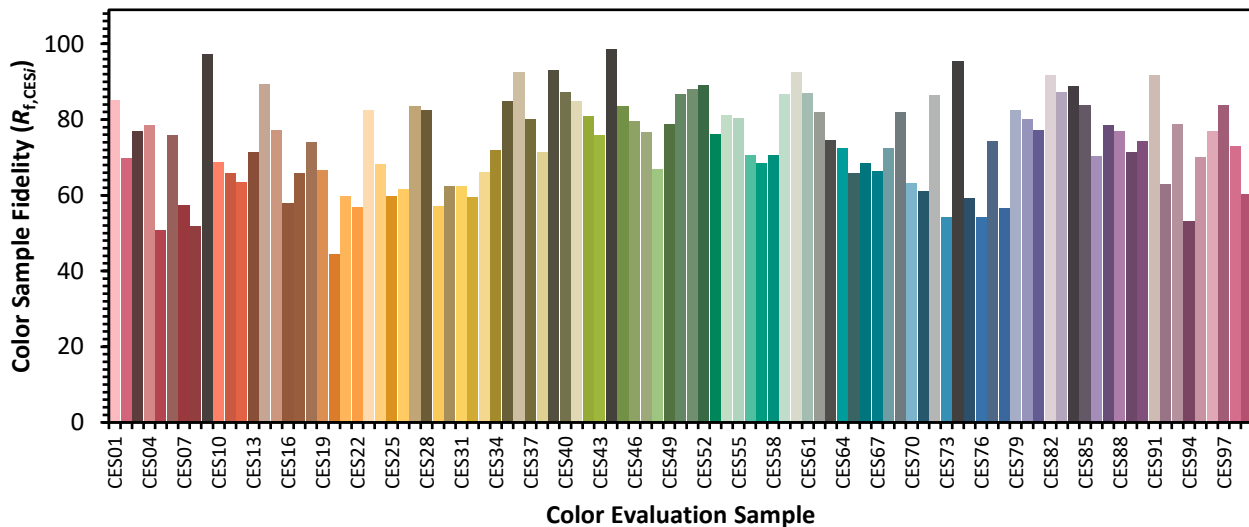


**Color Vector Graphics**

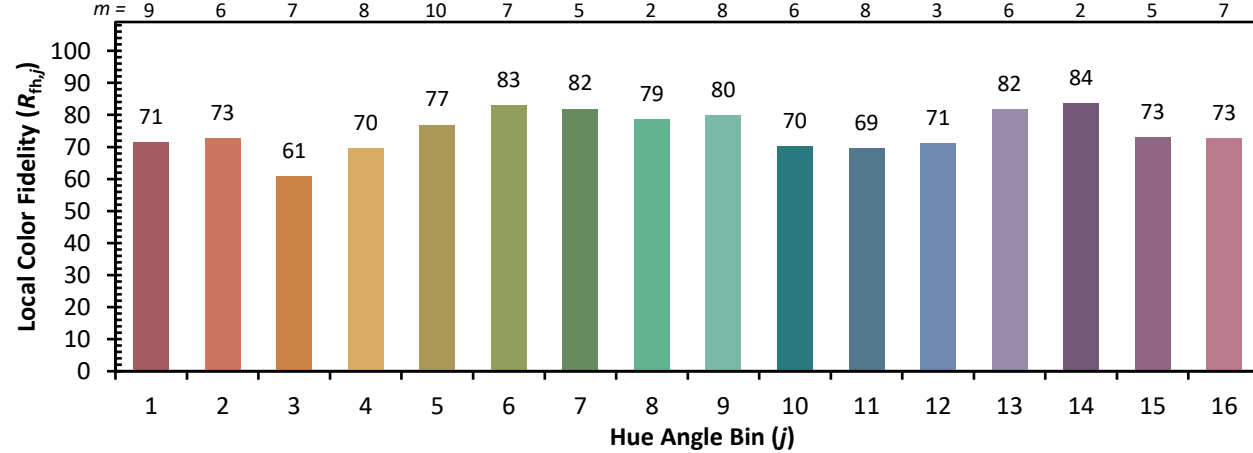
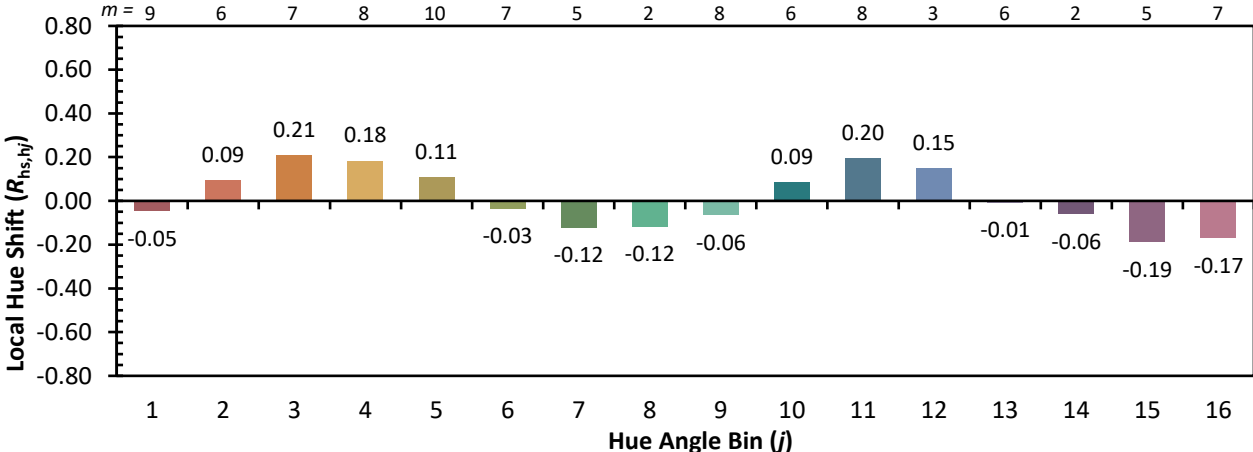
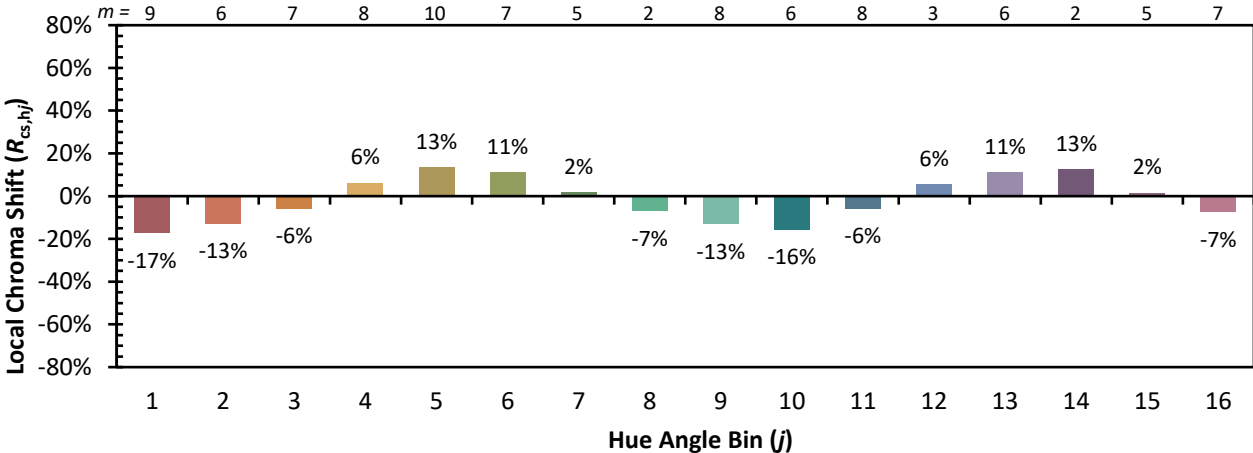


Individual Sample Fidelity Index ( $R_{f,i}$ )

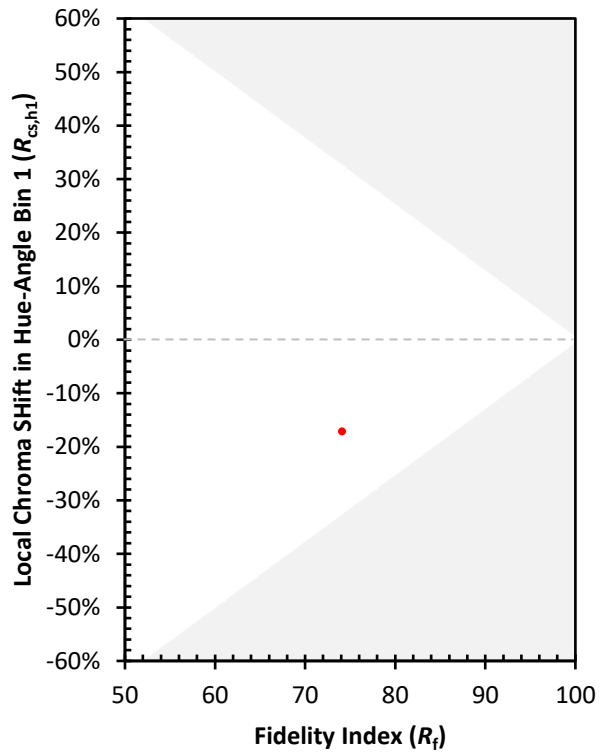
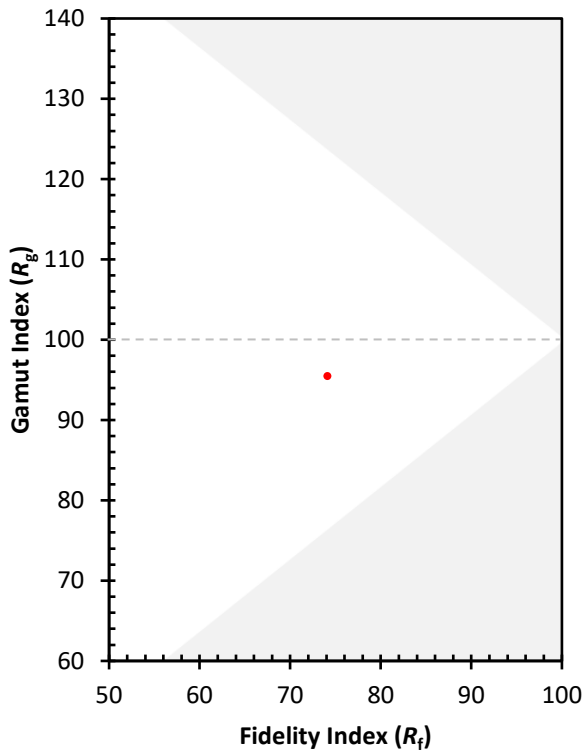
CES01 = 85	CES26 = 62	CES51 = 88	CES76 = 54
CES02 = 61	CES27 = 84	CES52 = 89	CES77 = 74
CES03 = 30	CES28 = 83	CES53 = 76	CES78 = 57
CES04 = 70	CES29 = 57	CES54 = 81	CES79 = 82
CES05 = 47	CES30 = 62	CES55 = 80	CES80 = 80
CES06 = 50	CES31 = 62	CES56 = 70	CES81 = 77
CES07 = 40	CES32 = 60	CES57 = 69	CES82 = 92
CES08 = 39	CES33 = 66	CES58 = 71	CES83 = 87
CES09 = 29	CES34 = 72	CES59 = 87	CES84 = 89
CES10 = 74	CES35 = 85	CES60 = 92	CES85 = 84
CES11 = 57	CES36 = 93	CES61 = 87	CES86 = 70
CES12 = 63	CES37 = 80	CES62 = 82	CES87 = 78
CES13 = 42	CES38 = 72	CES63 = 74	CES88 = 77
CES14 = 74	CES39 = 93	CES64 = 72	CES89 = 71
CES15 = 71	CES40 = 87	CES65 = 66	CES90 = 74
CES16 = 46	CES41 = 85	CES66 = 69	CES91 = 92
CES17 = 49	CES42 = 81	CES67 = 66	CES92 = 63
CES18 = 56	CES43 = 76	CES68 = 73	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 82	CES94 = 53
CES20 = 65	CES45 = 84	CES70 = 63	CES95 = 70
CES21 = 86	CES46 = 80	CES71 = 61	CES96 = 77
CES22 = 78	CES47 = 77	CES72 = 86	CES97 = 84
CES23 = 92	CES48 = 67	CES73 = 54	CES98 = 73
CES24 = 91	CES49 = 79	CES74 = 96	CES99 = 60
CES25 = 72	CES50 = 87	CES75 = 59	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)