

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: STREETWORKS

Report Number: P880511

Luminaire Tested: **MEM2-HSN-VA-30-AMB-U-WT4**

Issue Date: 10/02/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P880511  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/02/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-VA-30-AMB-U-WT4  
Description: EPIC MODERN SHORT HOUSING 30W 0CRI 1554K VISUAL COMFORT FIXTURE w/  
DRIVE LANE TYPE IV DISTRIBUTION OPTIC  
Light Source: (1) 1554K CCT, 0 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

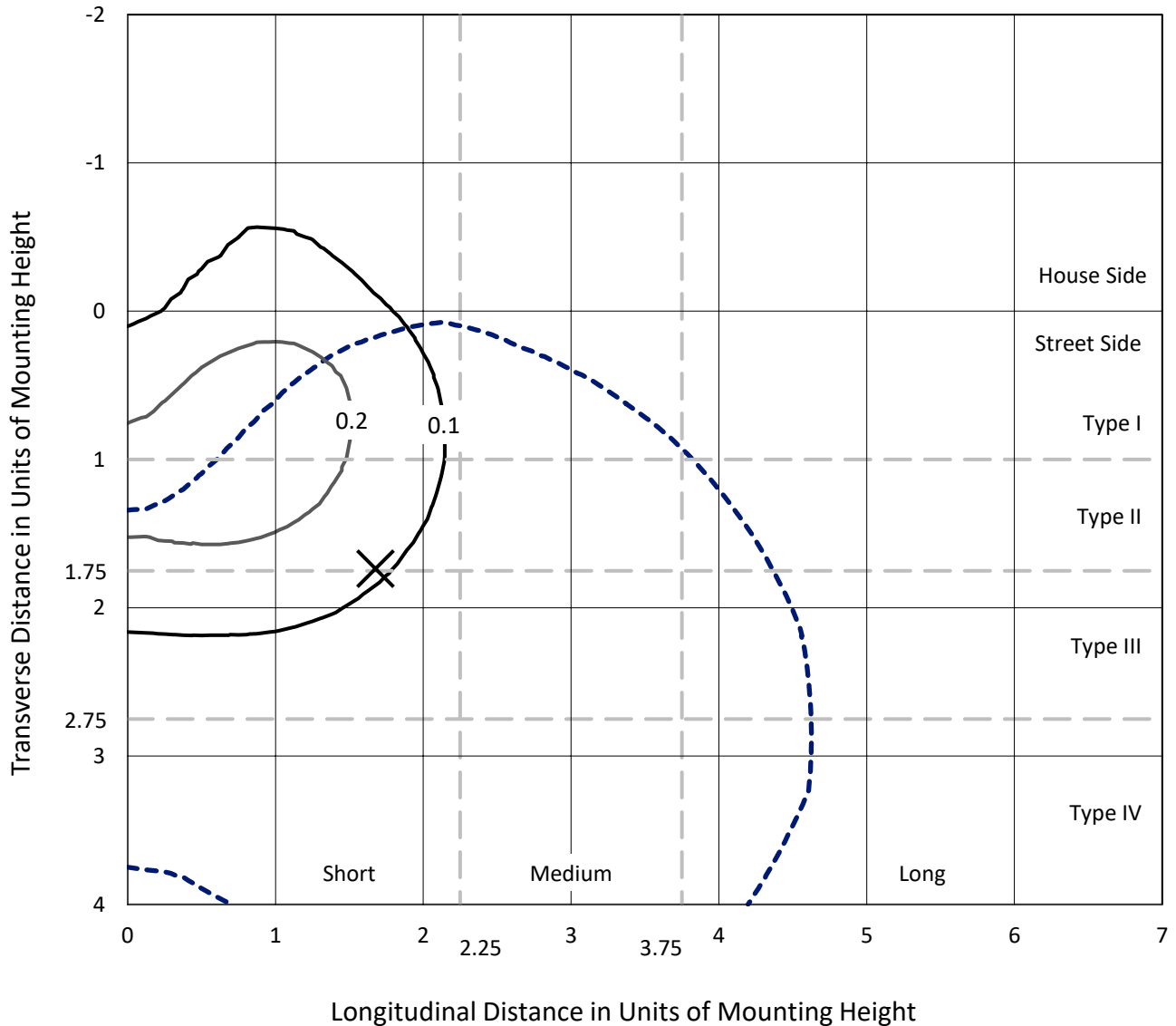
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 843 lumens  
Efficiency: N/A  
Efficacy: 26.3 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 32  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.98  
Total Harmonic Distortion (THDi): 16%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P880511  
 CATALOG NUMBER: MEM2-HSN-VA-30-AMB-U-WT4

### Iso-Footcandle Lines of Horizontal Illumination

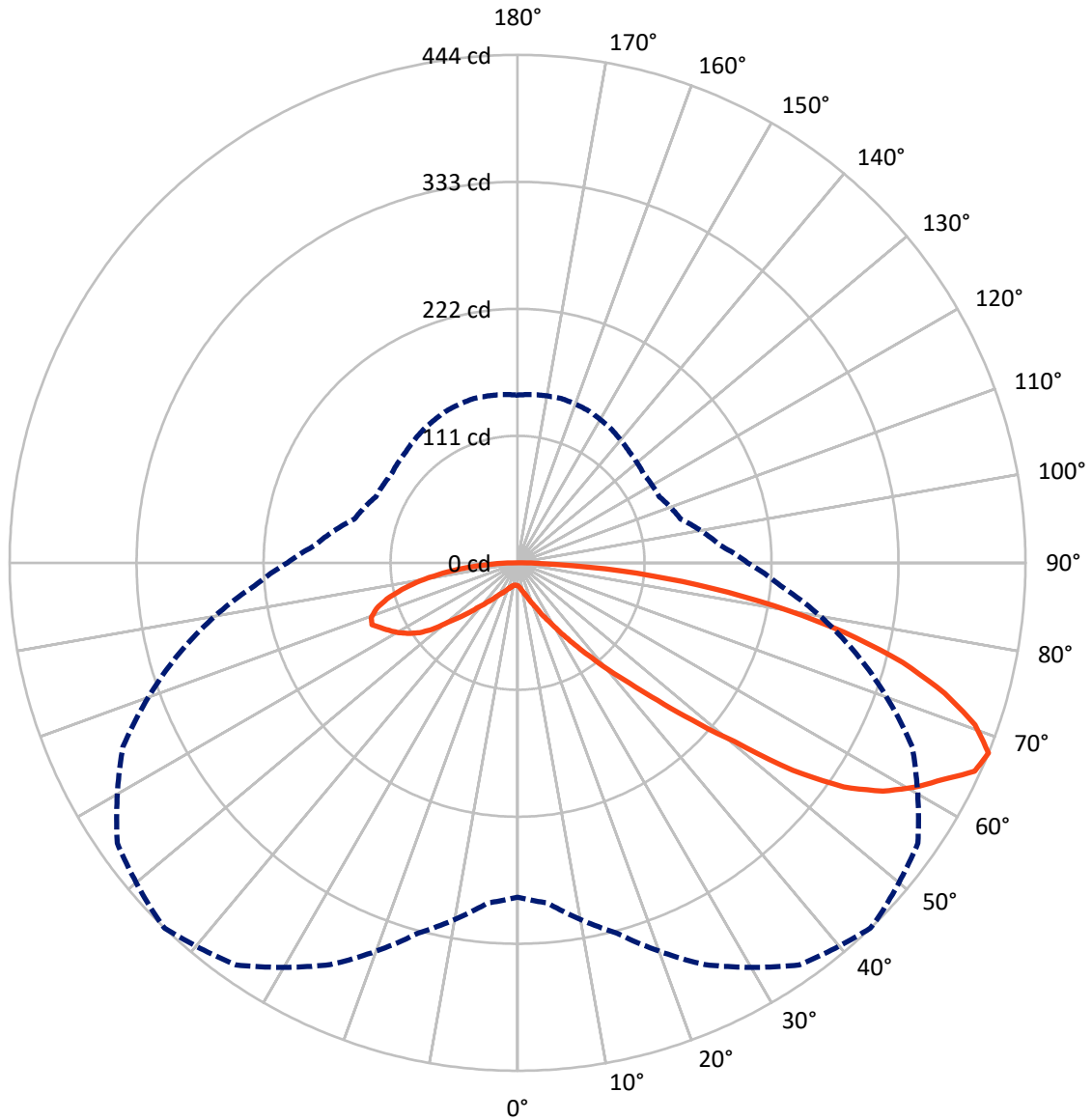
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 0.3 fc  
 Type IV - Short - N/A

REPORT NUMBER: P880511  
CATALOG NUMBER: MEM2-HSN-VA-30-AMB-U-WT4

### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P880511  
 CATALOG NUMBER: MEM2-HSN-VA-30-AMB-U-WT4

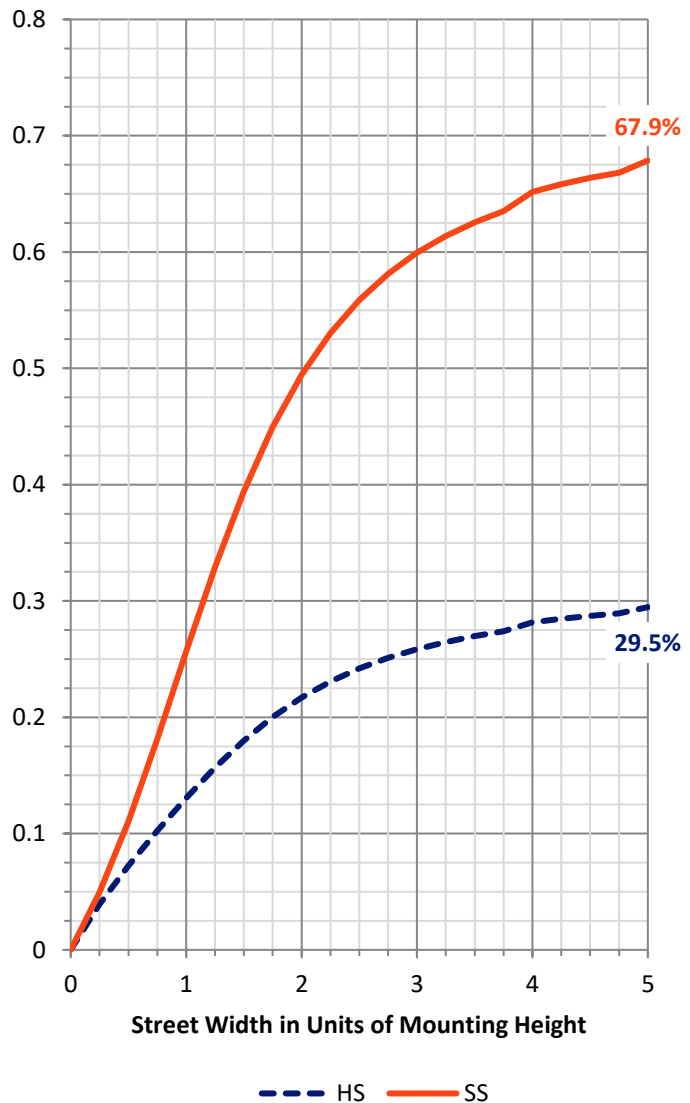
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	257.3	0.0	257.3
	% Fixture	30.5	0.0	30.5
<b>Street Side</b>	Lumens	585.7	0.0	585.7
	% Fixture	69.5	0.0	69.5
<b>Total</b>	Lumens	843.0	0.0	843.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2.0	0.2
10°-20°	7.6	0.9
20°-30°	18.1	2.1
30°-40°	39.6	4.7
40°-50°	85.7	10.2
50°-60°	175.1	20.8
60°-70°	245.6	29.1
70°-80°	205.5	24.4
80°-90°	63.8	7.6
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°	843.0	100.0
0°-180°	843.0	100.0

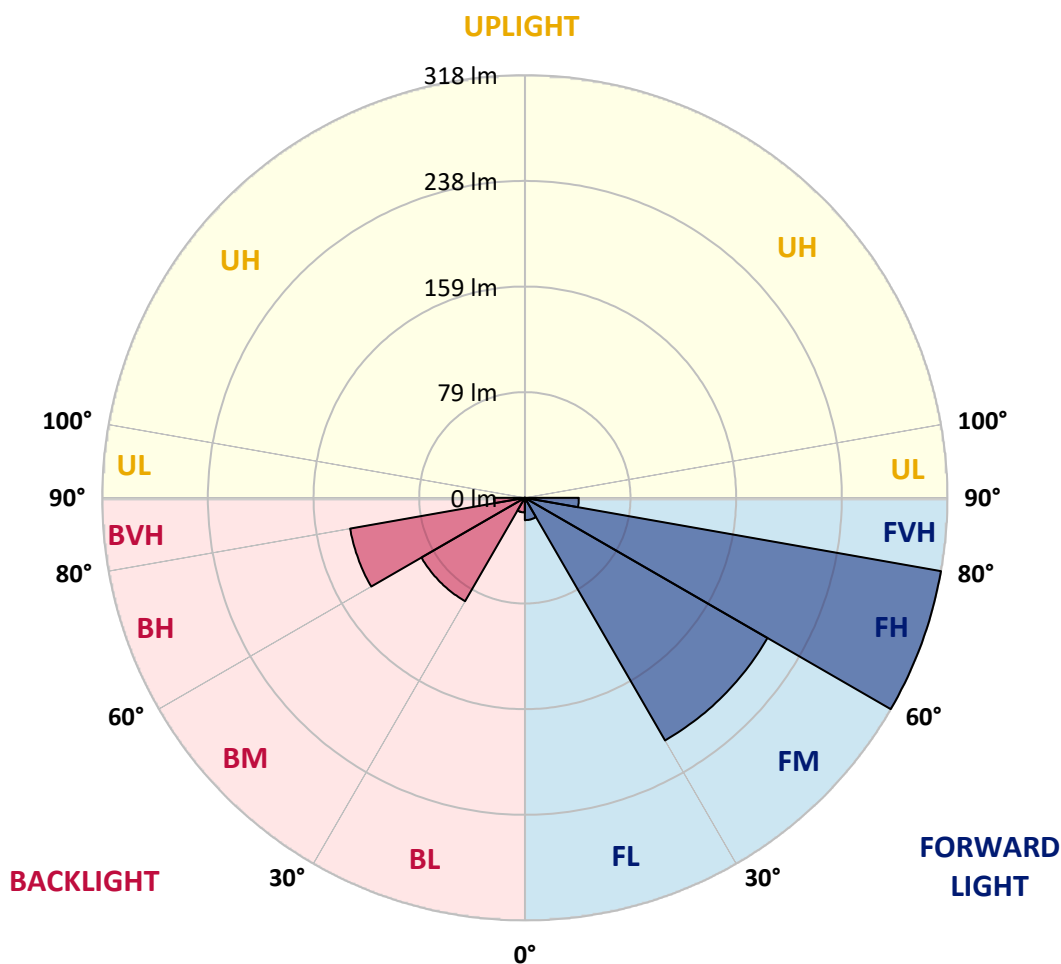


REPORT NUMBER: P880511  
 CATALOG NUMBER: MEM2-HSN-VA-30-AMB-U-WT4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	16.8	2.0			
FM (30°-60°)	210.6	25.0			
FH (60°-80°)	317.7	37.7			G0/660
FVH (80°-90°)	40.6	4.8			G1/100
BL (0°-30°)	11.0	1.3	B0/110		
BM (30°-60°)	89.7	10.6	B0/220		
BH (60°-80°)	133.4	15.8	B1/500		G1/500
BVH (80°-90°)	23.2	2.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type IV Short





REPORT NUMBER: P880511  
 CATALOG NUMBER: MEM2-HSN-VA-30-AMB-U-WT4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
2.5°	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
5°	22.8	22.8	22.8	22.8	21.8	21.8	21.8	21.8	21.8	20.8	20.8
7.5°	23.8	23.8	23.8	23.8	23.8	23.8	23.8	22.8	22.8	21.8	21.8
10°	25.8	26.8	26.8	26.8	25.8	25.8	25.8	24.8	24.8	23.8	22.8
12.5°	28.8	28.8	28.8	28.8	28.8	27.8	27.8	27.8	26.8	25.8	24.8
15°	31.7	31.7	31.7	31.7	31.7	30.7	30.7	29.7	28.8	27.8	26.8
17.5°	35.7	35.7	35.7	35.7	34.7	34.7	34.7	33.7	31.7	30.7	28.8
20°	39.7	39.7	38.7	38.7	38.7	38.7	38.7	37.7	35.7	33.7	31.7
22.5°	43.6	43.6	43.6	44.6	44.6	43.6	43.6	42.6	40.7	37.7	35.7
25°	48.6	48.6	49.6	50.6	50.6	50.6	50.6	48.6	46.6	42.6	39.7
27.5°	54.5	54.5	56.5	57.5	57.5	57.5	57.5	55.5	52.6	48.6	43.6
30°	61.5	61.5	63.5	64.5	65.4	66.4	65.4	64.5	60.5	54.5	49.6
32.5°	70.4	70.4	71.4	74.4	76.3	77.3	77.3	75.4	69.4	63.5	55.5
35°	80.3	80.3	81.3	86.3	89.2	90.2	90.2	87.3	82.3	73.4	62.5
37.5°	90.2	91.2	94.2	99.2	103.1	105.1	105.1	103.1	95.2	84.3	72.4
40°	103.1	104.1	108.1	114.0	120.0	123.9	123.0	121.0	112.0	99.2	83.3
42.5°	117.0	119.0	123.9	131.9	140.8	143.8	144.8	141.8	130.9	116.0	97.2
45°	134.9	136.8	141.8	153.7	164.6	171.5	172.5	168.6	155.7	133.9	111.1
47.5°	153.7	155.7	165.6	181.5	196.3	205.3	204.3	201.3	184.4	157.7	128.9
50°	176.5	177.5	192.4	215.2	238.0	245.9	246.9	238.0	215.2	182.4	147.7
52.5°	206.2	206.2	229.0	261.8	291.5	301.4	299.4	288.5	255.8	209.2	165.6
55°	248.9	248.9	270.7	306.4	334.2	346.1	345.1	334.2	299.4	239.0	185.4
57.5°	284.6	284.6	302.4	334.2	361.9	376.8	376.8	362.9	322.3	265.7	205.3
60°	304.4	308.4	325.2	358.0	386.7	398.6	398.6	381.7	341.1	280.6	219.1
62.5°	309.4	314.3	338.1	373.8	405.5	417.4	417.4	403.6	364.9	299.4	233.0
65°	304.4	310.4	341.1	383.7	423.4	439.3	440.2	428.4	384.7	313.3	240.0
67.5°	292.5	298.5	335.1	387.7	429.3	444.2	443.2	427.4	380.8	306.4	231.0
70°	275.7	280.6	321.3	375.8	412.5	424.4	424.4	406.5	361.9	292.5	216.2
72.5°	252.8	258.8	295.5	346.1	377.8	390.7	388.7	376.8	334.2	266.7	197.3
75°	222.1	225.1	256.8	300.4	332.2	348.0	349.0	333.2	294.5	235.0	172.5
77.5°	181.5	185.4	211.2	247.9	281.6	292.5	292.5	280.6	245.9	197.3	144.8
80°	135.8	138.8	158.6	188.4	214.2	227.1	228.1	219.1	195.3	156.7	113.0
82.5°	92.2	89.2	108.1	126.9	148.7	158.6	158.6	157.7	139.8	115.0	81.3
85°	38.7	41.6	48.6	65.4	82.3	91.2	90.2	91.2	82.3	69.4	50.6
87.5°	2.0	2.0	3.0	7.9	16.9	19.8	21.8	24.8	24.8	21.8	17.8
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: P880511  
 CATALOG NUMBER: MEM2-HSN-VA-30-AMB-U-WT4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
2.5°	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
5°	20.8	20.8	19.8	19.8	19.8	19.8	19.8	18.8	18.8	18.8	18.8
7.5°	21.8	21.8	20.8	20.8	19.8	19.8	19.8	18.8	18.8	18.8	18.8
10°	22.8	22.8	21.8	20.8	20.8	19.8	19.8	19.8	19.8	19.8	19.8
12.5°	23.8	23.8	22.8	21.8	21.8	20.8	20.8	19.8	19.8	19.8	19.8
15°	25.8	25.8	23.8	22.8	22.8	21.8	20.8	20.8	20.8	20.8	20.8
17.5°	28.8	27.8	25.8	24.8	23.8	22.8	22.8	21.8	21.8	21.8	21.8
20°	30.7	29.7	27.8	25.8	24.8	23.8	23.8	22.8	22.8	22.8	22.8
22.5°	33.7	32.7	29.7	27.8	26.8	25.8	24.8	24.8	24.8	24.8	24.8
25°	37.7	35.7	32.7	29.7	28.8	27.8	26.8	26.8	25.8	25.8	26.8
27.5°	41.6	39.7	35.7	32.7	30.7	29.7	28.8	28.8	28.8	27.8	27.8
30°	46.6	43.6	38.7	35.7	32.7	31.7	30.7	30.7	30.7	30.7	30.7
32.5°	51.6	48.6	42.6	38.7	36.7	34.7	33.7	33.7	33.7	33.7	32.7
35°	58.5	54.5	47.6	42.6	39.7	38.7	37.7	37.7	37.7	37.7	36.7
37.5°	66.4	61.5	52.6	46.6	43.6	42.6	41.6	41.6	41.6	41.6	41.6
40°	76.3	69.4	59.5	52.6	49.6	47.6	47.6	46.6	46.6	46.6	47.6
42.5°	87.3	79.3	66.4	59.5	55.5	53.5	52.6	52.6	53.5	53.5	53.5
45°	100.1	90.2	76.3	67.4	62.5	61.5	60.5	59.5	60.5	61.5	60.5
47.5°	115.0	103.1	85.3	75.4	71.4	70.4	68.4	68.4	68.4	69.4	68.4
50°	130.9	117.0	95.2	85.3	81.3	80.3	79.3	79.3	78.3	78.3	77.3
52.5°	146.7	130.9	107.1	98.2	94.2	94.2	93.2	92.2	91.2	88.2	88.2
55°	161.6	143.8	120.0	109.1	105.1	105.1	106.1	108.1	107.1	104.1	105.1
57.5°	177.5	155.7	127.9	116.0	112.0	113.0	115.0	119.0	122.0	123.9	123.9
60°	190.4	165.6	133.9	121.0	119.0	120.0	123.9	127.9	133.9	138.8	140.8
62.5°	203.3	177.5	142.8	127.9	123.9	125.9	129.9	136.8	142.8	147.7	147.7
65°	209.2	183.4	149.7	135.8	130.9	131.9	135.8	142.8	147.7	149.7	149.7
67.5°	201.3	177.5	147.7	136.8	134.9	137.8	142.8	146.7	148.7	147.7	146.7
70°	187.4	165.6	138.8	130.9	130.9	135.8	143.8	146.7	145.8	142.8	141.8
72.5°	170.5	149.7	127.9	121.0	123.0	128.9	136.8	140.8	138.8	133.9	132.9
75°	147.7	129.9	111.1	109.1	112.0	118.0	123.9	128.9	126.9	123.0	123.0
77.5°	123.0	109.1	94.2	93.2	97.2	103.1	109.1	111.1	111.1	108.1	108.1
80°	96.2	85.3	74.4	75.4	80.3	86.3	91.2	91.2	90.2	89.2	89.2
82.5°	69.4	62.5	56.5	57.5	61.5	65.4	69.4	69.4	68.4	68.4	67.4
85°	43.6	39.7	35.7	37.7	42.6	45.6	46.6	46.6	45.6	45.6	45.6
87.5°	15.9	14.9	15.9	16.9	19.8	21.8	23.8	23.8	23.8	23.8	23.8
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

Streetworks

Report Number: SP1-2407-176-1

Test Date: 09/23/2024

Luminaire Tested: MEM2-HTN-VA-60-AMB-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-60-AMB-U-WQ

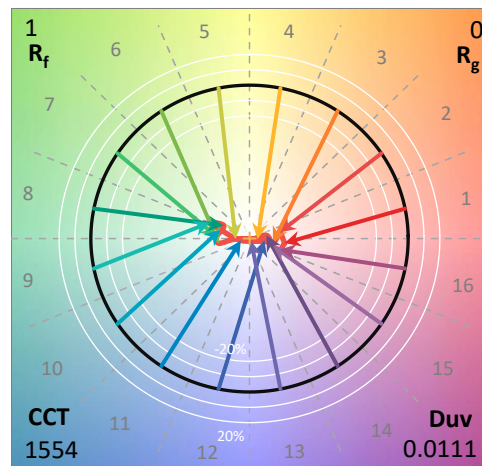
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-176-1  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 09/27/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-VA-60-AMB-U-WQ**  
 Description: EPIC MODERN VISUAL COMFORT 60W AMBER WAVESTREAM WIDE

**Spectral Parameters**

CCT (K): 1554  
 CIE u': 0.3509  
 CIE v': 0.5472  
 Duv: 0.0111  
 CIE x: 0.5903  
 CIE y: 0.4091  
 CIE z: 0.0006  
 Peak Wavelength (nm): 596  
 Dominant Wavelength (nm): 592  
 Purity: 99.98723  
 Rf: 1.1  
 Rg: 0

CRI (Ra): -22.5  
 R1: -35.4  
 R2: 51.6  
 R3: 17.0  
 R4: -69.3  
 R5: -41.7  
 R6: 40.2  
 R7: -7.3  
 R8: -135.2  
 R9: -390.1  
 R10: 27.7  
 R11: -96.9  
 R12: -12.7  
 R13: -16.6  
 R14: 45.8  
 R15: -68.6



**Test Conditions**

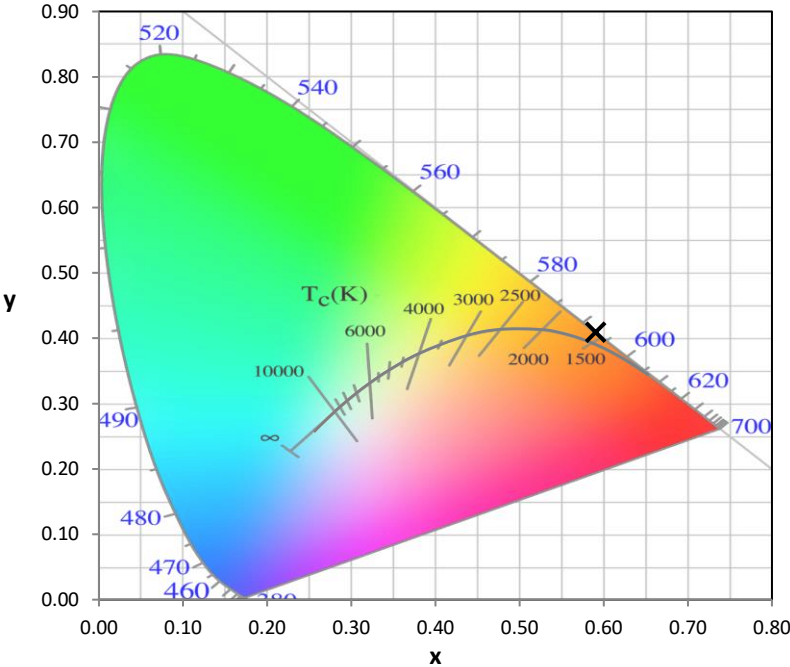
Stabilization Time: 98M  
 Operation Time: 2H 38M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-176-1

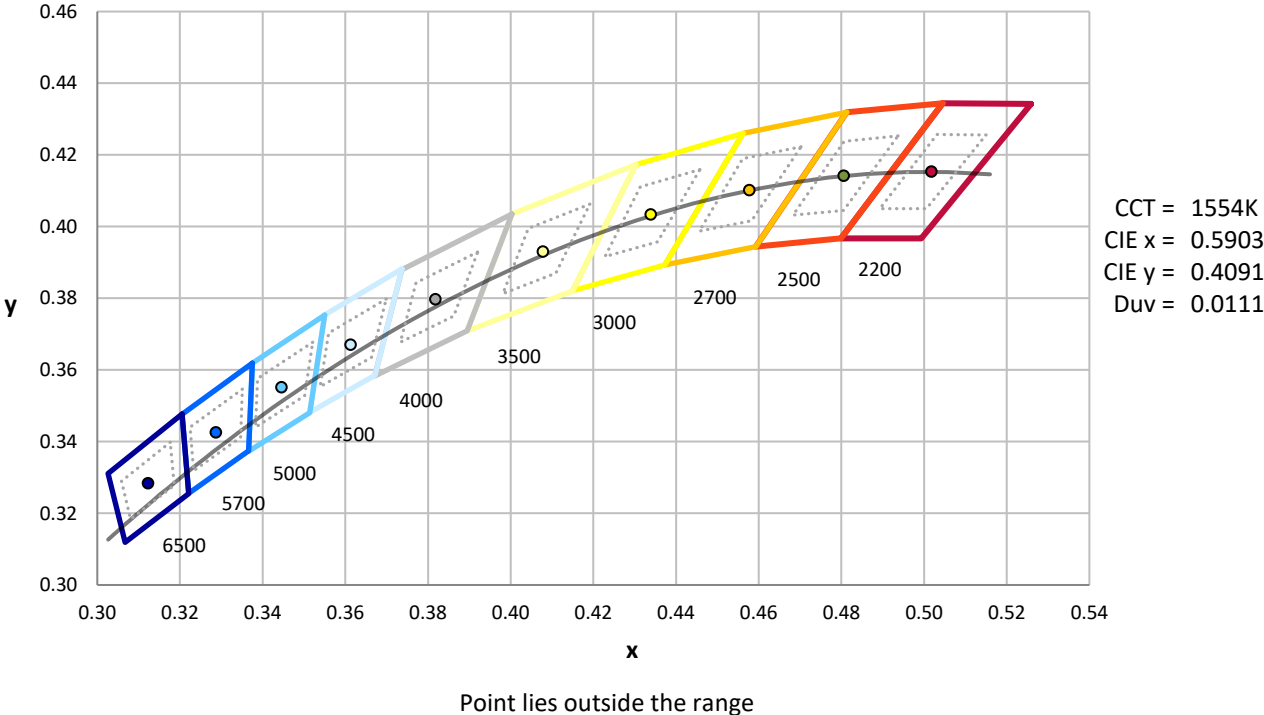
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-176-1

CIE 1931 Chromaticity Diagram

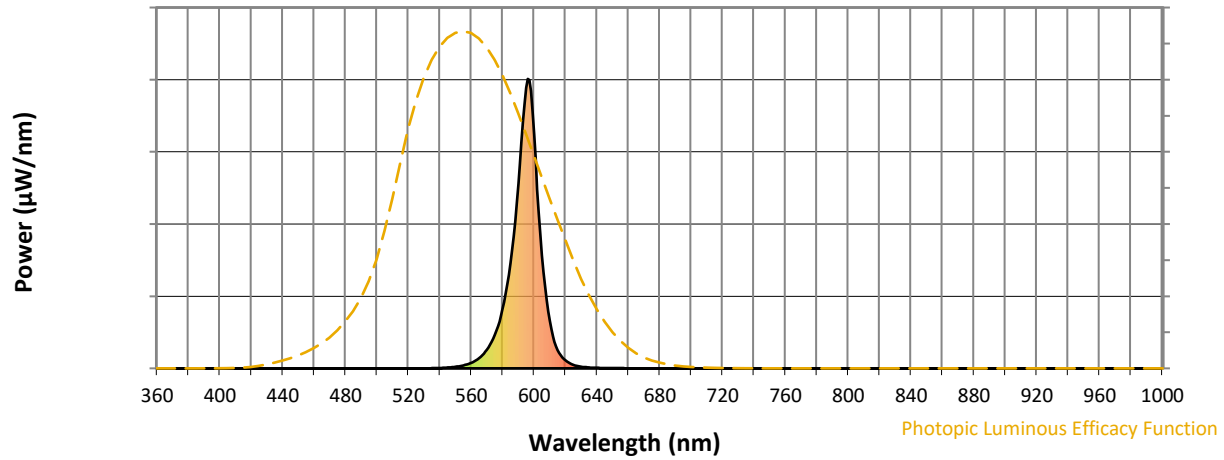


CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



REPORT NUMBER: SP1-2407-176-1

**Photopic Flux vs. Wavelength**

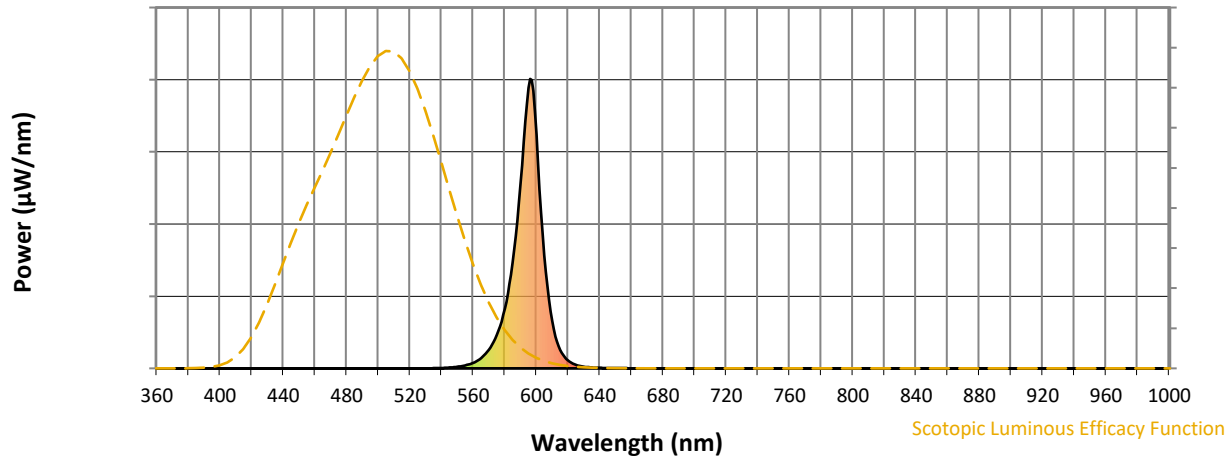


**Photopic Lumens: NR**

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	0	NR	620	27	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	12	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	6	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	3	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	2	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	1	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	1	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	0	NR	795	0	NR	925	0	NR
410	0	NR	540	1	NR	670	0	NR	800	0	NR	930	0	NR
415	0	NR	545	3	NR	675	0	NR	805	0	NR	935	0	NR
420	0	NR	550	5	NR	680	0	NR	810	0	NR	940	0	NR
425	0	NR	555	10	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	19	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	35	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	64	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	116	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	206	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	364	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	639	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	970	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	808	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	391	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	164	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	63	NR	745	0	NR	875	0	NR			

REPORT NUMBER: SP1-2407-176-1

**Scotopic Flux vs. Wavelength**



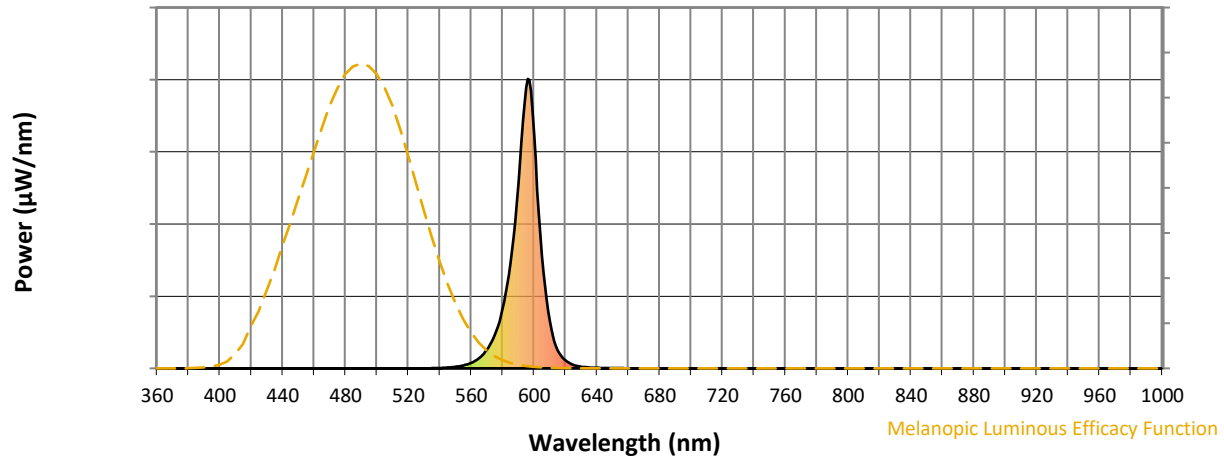
**Scotopic Lumens: NR**

**S/P: 0.22**

$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )
360	0	NR	490	0	NR	620	27	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	12	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	6	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	3	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	2	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	1	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	1	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	0	NR	795	0	NR	925	0	NR
410	0	NR	540	1	NR	670	0	NR	800	0	NR	930	0	NR
415	0	NR	545	3	NR	675	0	NR	805	0	NR	935	0	NR
420	0	NR	550	5	NR	680	0	NR	810	0	NR	940	0	NR
425	0	NR	555	10	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	19	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	35	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	64	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	116	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	206	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	364	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	639	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	970	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	808	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	391	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	164	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	63	NR	745	0	NR	875	0	NR			

REPORT NUMBER: SP1-2407-176-1

**Melanopic Flux vs. Wavelength**



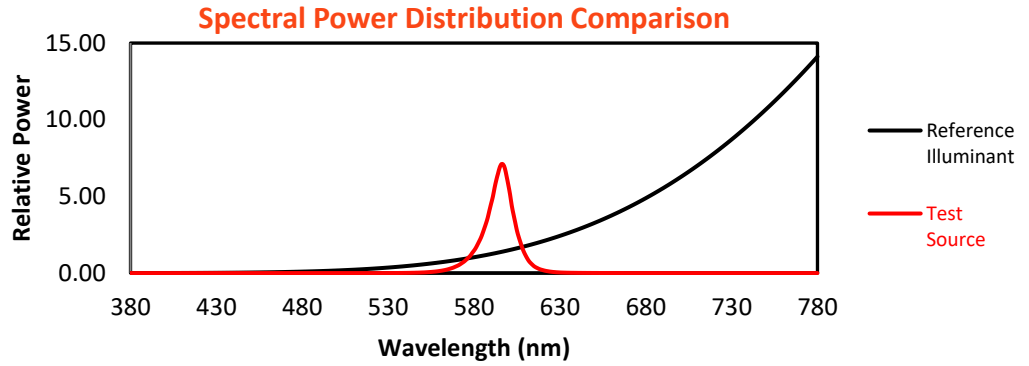
**Melanopic Lumens: NR**

**M/P: 0.12**

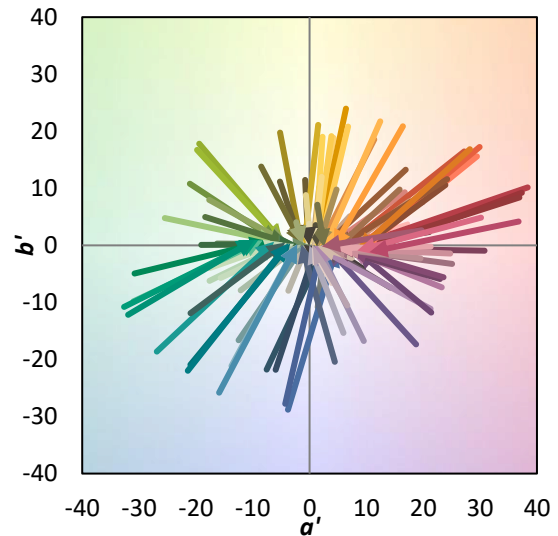
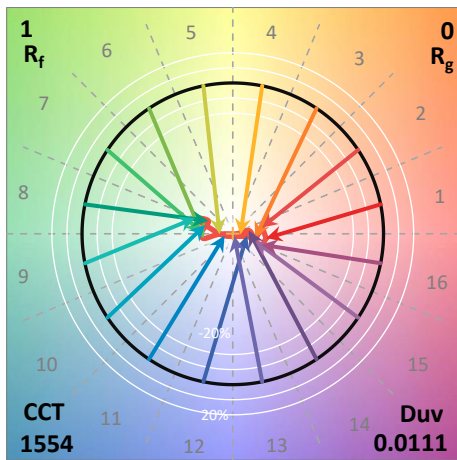
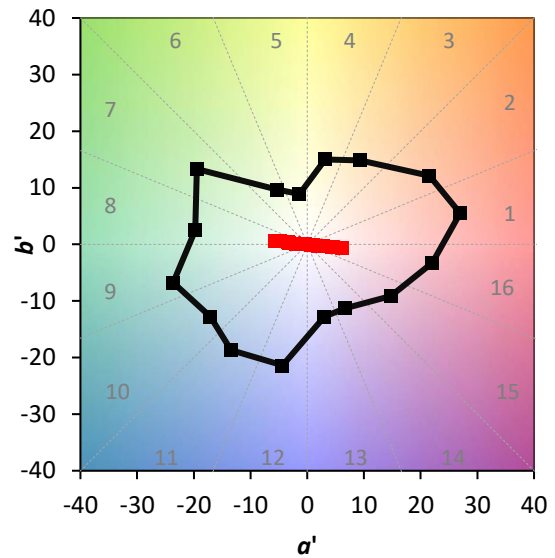
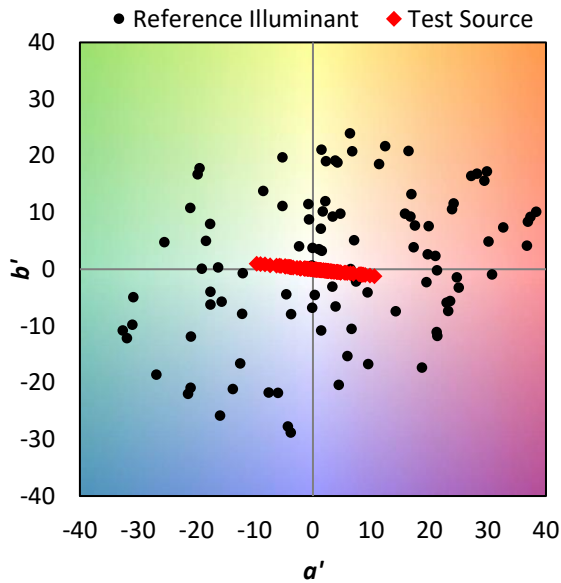
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	0	NR	620	27	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	12	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	6	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	3	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	2	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	1	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	1	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	0	NR	795	0	NR	925	0	NR
410	0	NR	540	1	NR	670	0	NR	800	0	NR	930	0	NR
415	0	NR	545	3	NR	675	0	NR	805	0	NR	935	0	NR
420	0	NR	550	5	NR	680	0	NR	810	0	NR	940	0	NR
425	0	NR	555	10	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	19	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	35	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	64	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	116	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	206	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	364	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	639	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	970	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	808	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	391	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	164	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	63	NR	745	0	NR	875	0	NR			

**Summary**

$R_f = 1.1$   
 $R_g = 0$   
 $CIE R_a = -22.5$   
 $R_g = -390.1$



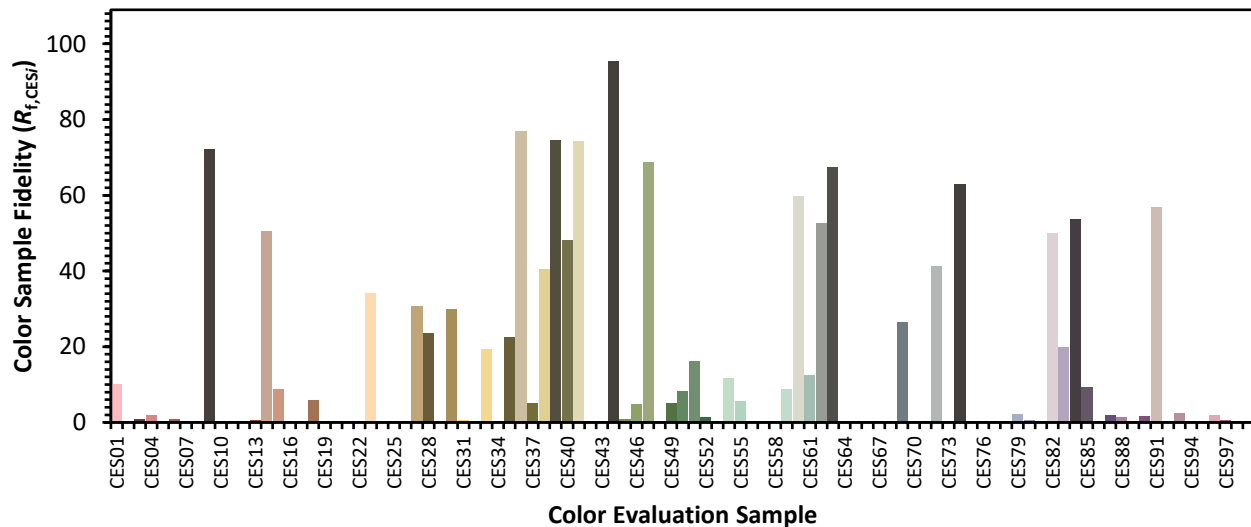
**Color Vector Graphics**



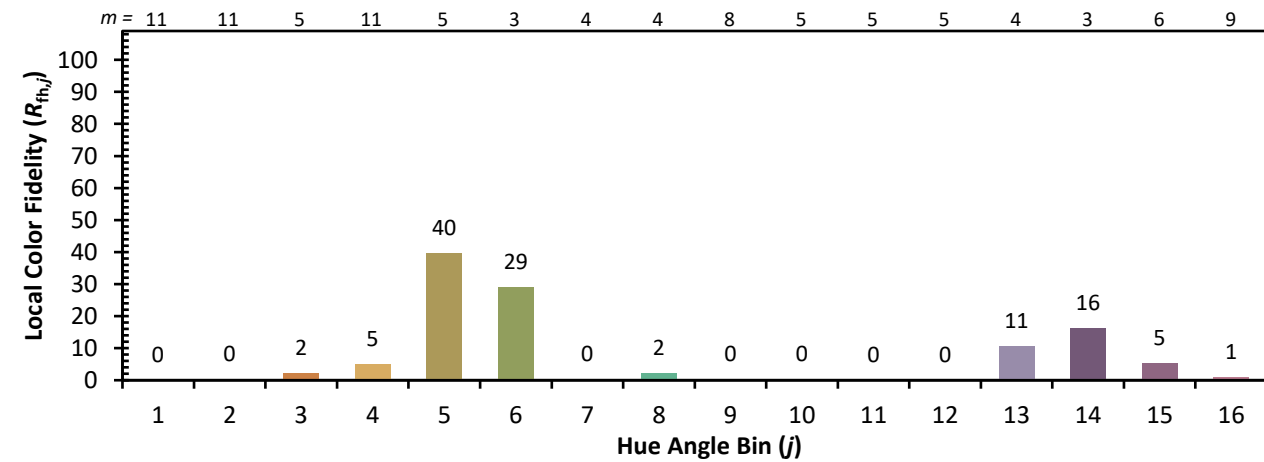
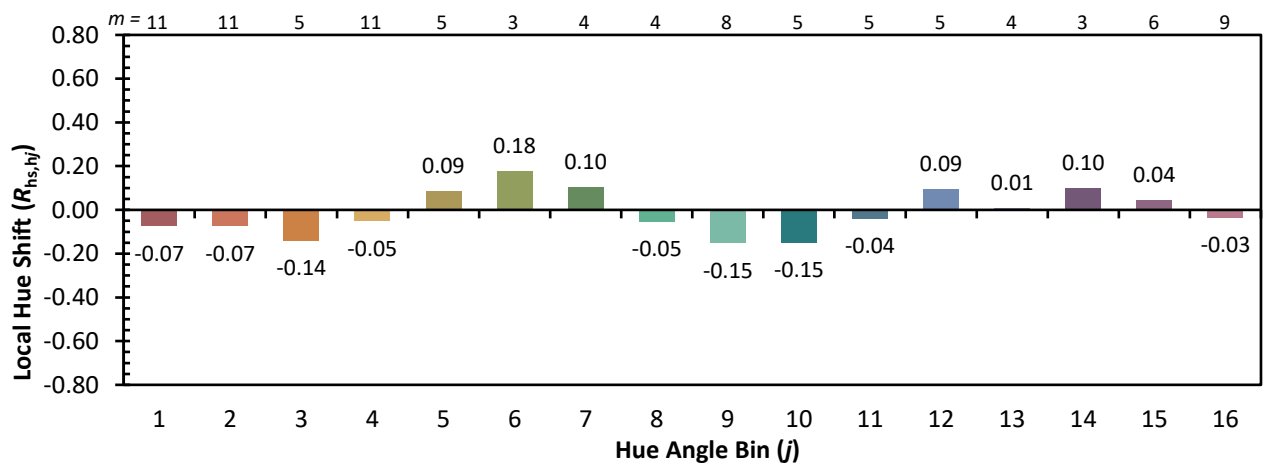
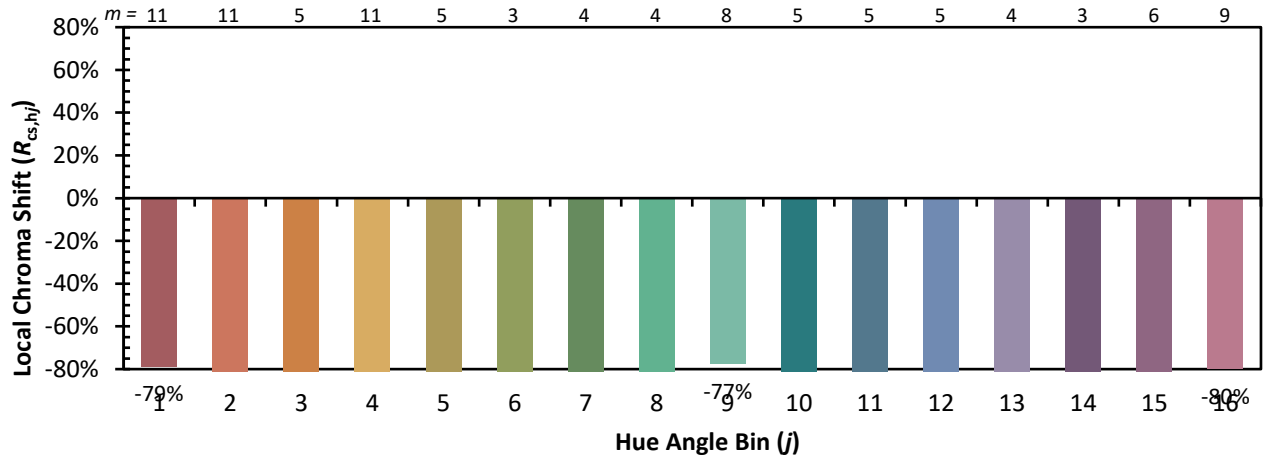


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

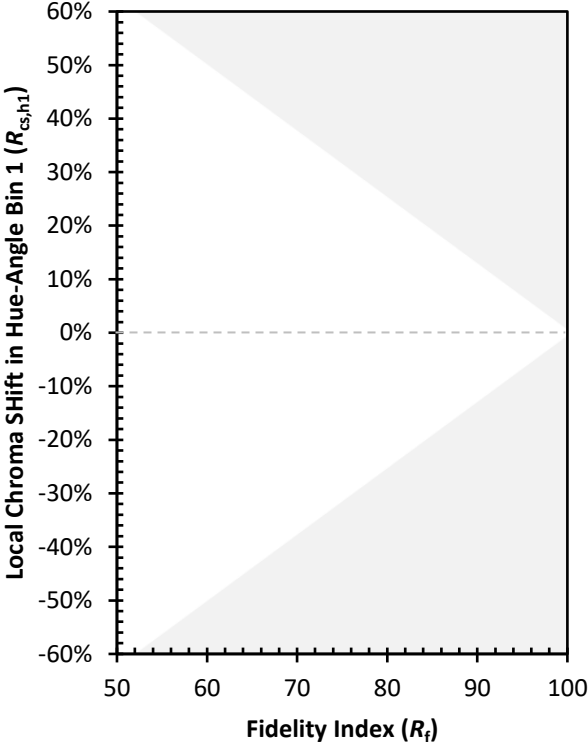
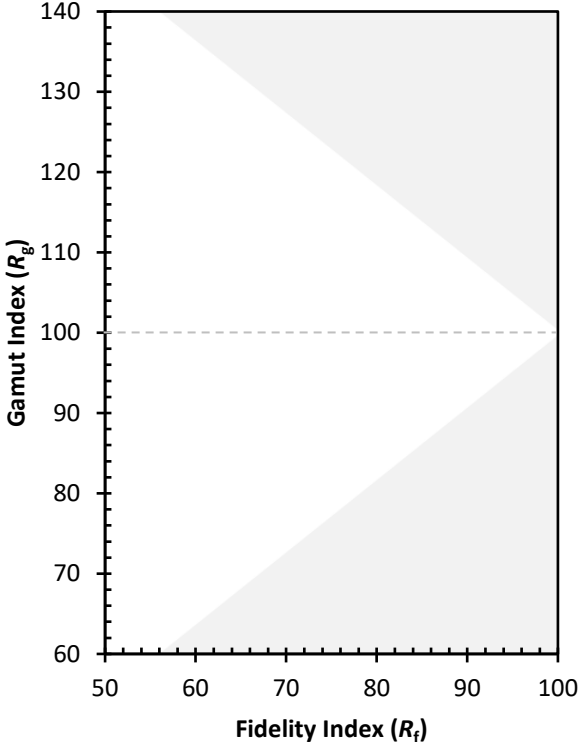
CES01 = 90	CES26 = 0	CES51 = 16	CES76 = 0
CES02 = 69	CES27 = 31	CES52 = 2	CES77 = 0
CES03 = 31	CES28 = 24	CES53 = 0	CES78 = 0
CES04 = 77	CES29 = 0	CES54 = 12	CES79 = 2
CES05 = 52	CES30 = 30	CES55 = 6	CES80 = 1
CES06 = 56	CES31 = 1	CES56 = 0	CES81 = 0
CES07 = 41	CES32 = 0	CES57 = 0	CES82 = 50
CES08 = 38	CES33 = 19	CES58 = 0	CES83 = 20
CES09 = 29	CES34 = 0	CES59 = 9	CES84 = 54
CES10 = 87	CES35 = 22	CES60 = 60	CES85 = 9
CES11 = 70	CES36 = 77	CES61 = 12	CES86 = 0
CES12 = 75	CES37 = 5	CES62 = 53	CES87 = 2
CES13 = 47	CES38 = 40	CES63 = 67	CES88 = 1
CES14 = 76	CES39 = 75	CES64 = 0	CES89 = 0
CES15 = 74	CES40 = 48	CES65 = 0	CES90 = 2
CES16 = 49	CES41 = 74	CES66 = 0	CES91 = 57
CES17 = 56	CES42 = 0	CES67 = 0	CES92 = 0
CES18 = 59	CES43 = 0	CES68 = 0	CES93 = 2
CES19 = 80	CES44 = 95	CES69 = 26	CES94 = 0
CES20 = 71	CES45 = 1	CES70 = 0	CES95 = 0
CES21 = 94	CES46 = 5	CES71 = 0	CES96 = 2
CES22 = 87	CES47 = 69	CES72 = 41	CES97 = 1
CES23 = 94	CES48 = 0	CES73 = 0	CES98 = 0
CES24 = 95	CES49 = 5	CES74 = 63	CES99 = 0
CES25 = 79	CES50 = 8	CES75 = 0	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)