

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: INVUE

Report Number: P868852

Luminaire Tested: **EMM2-HSN-SA1B-740-U-T2R-HSS**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868852  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA1B-740-U-T2R-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 60W 70CRI 4000K  
FIXTURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

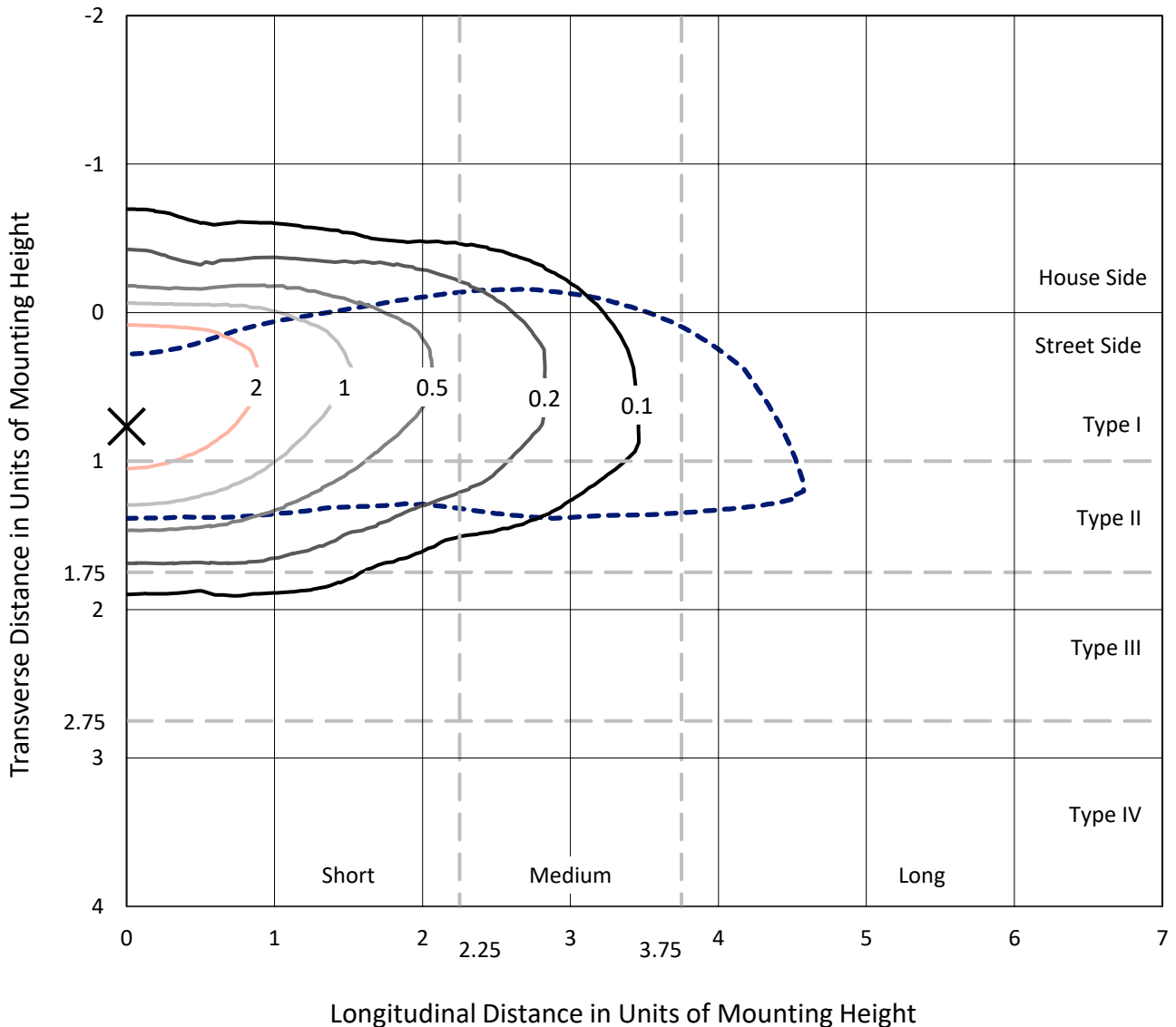
Lumens per Lamp: N/A  
Luminaire Lumens: 4468.6 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 44  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6.91%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Iso-Footcandle Lines of Horizontal Illumination

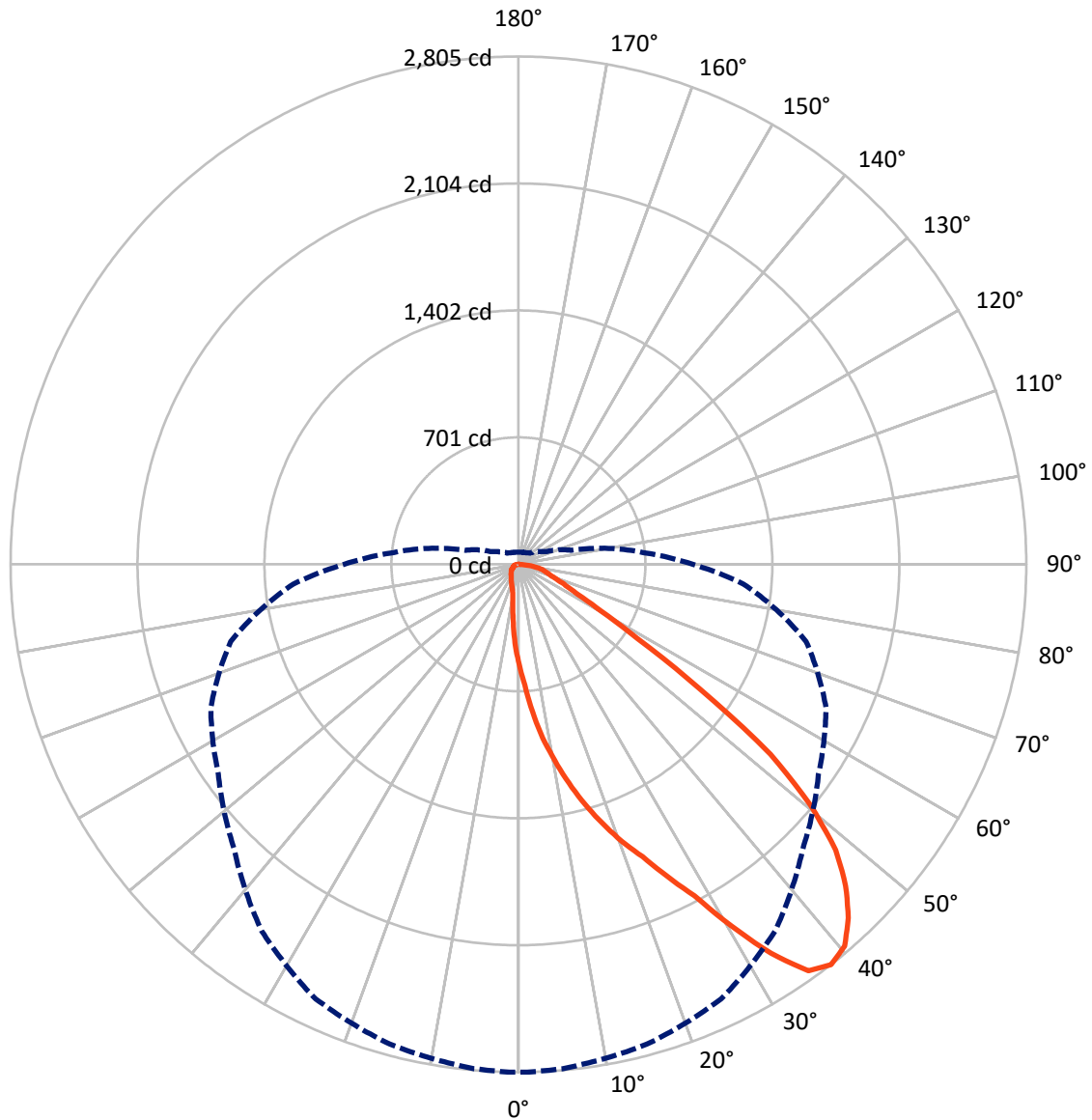
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.8 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 37.5-Deg Vertical

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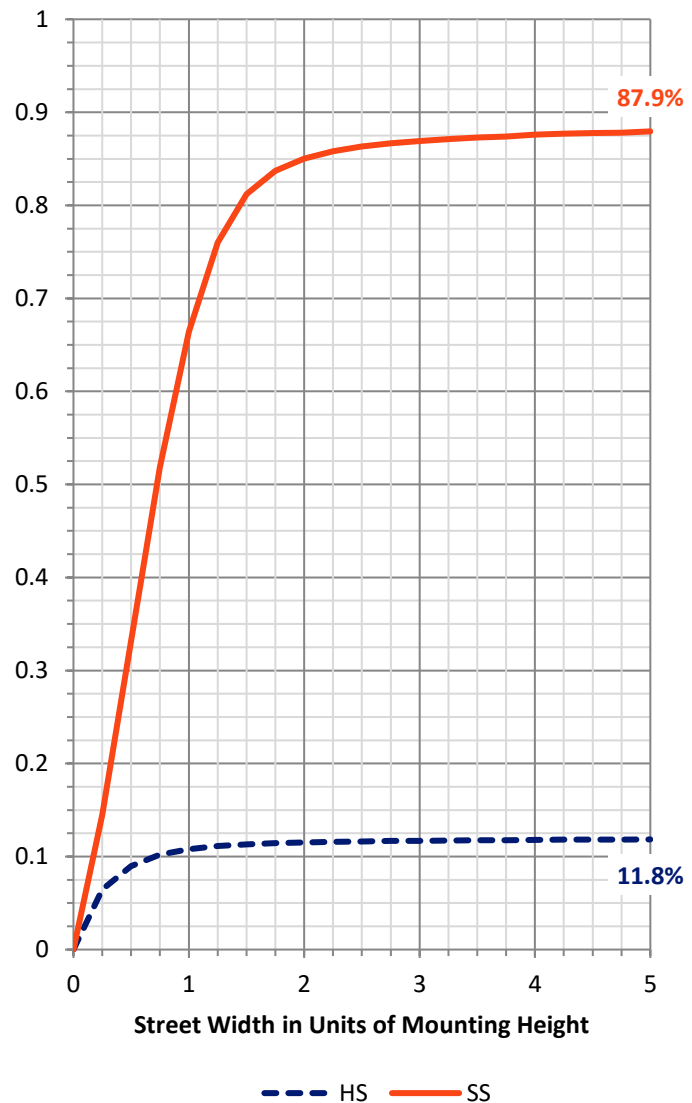
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	533.0	0.0	533.0
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	3935.6	0.0	3935.6
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	4468.6	0.0	4468.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.6	1.2
10°-20°	194.2	4.3
20°-30°	400.7	9.0
30°-40°	705.0	15.8
40°-50°	957.2	21.4
50°-60°	948.3	21.2
60°-70°	730.1	16.3
70°-80°	423.7	9.5
80°-90°	53.9	1.2
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°	4468.6	100.0
0°-180°	4468.6	100.0



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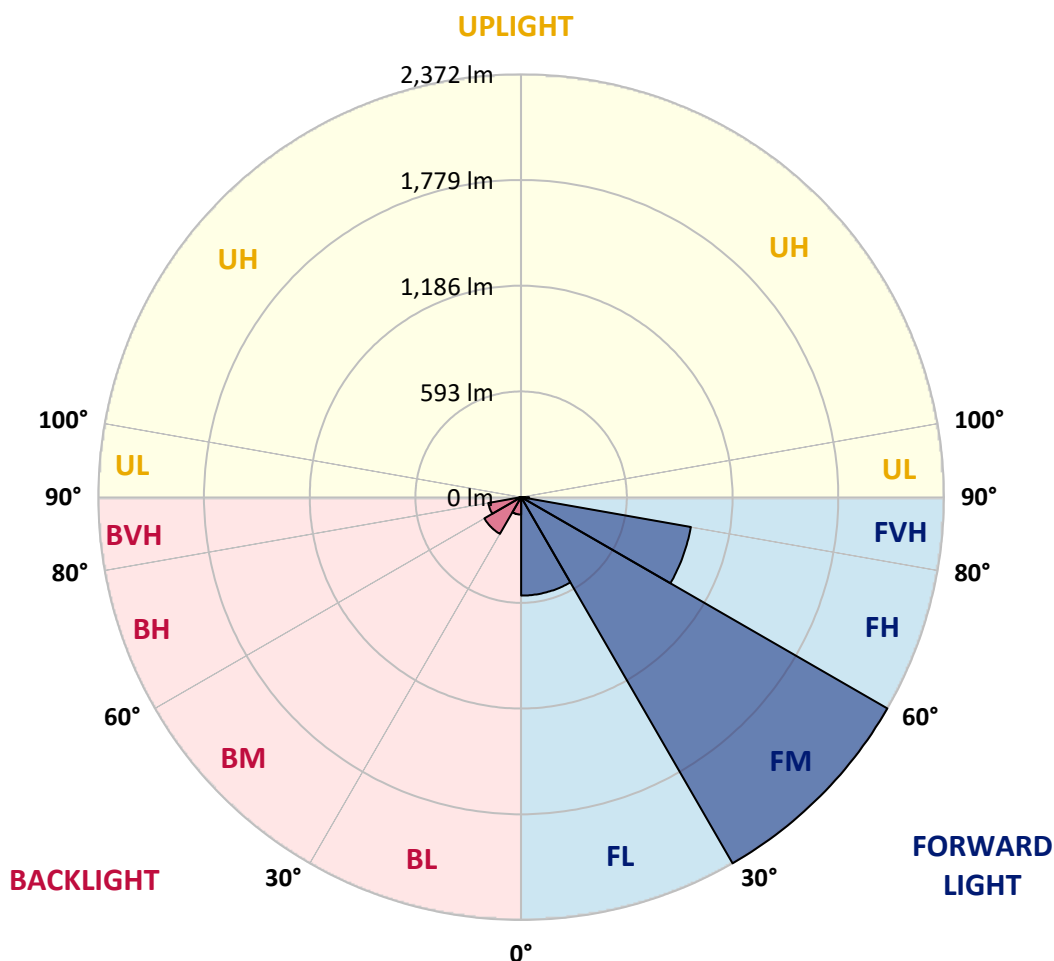
CATALOG NUMBER: EMM2-HSN-SA1B-740-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	552.4	12.4			
FM (30°-60°)	2372.4	53.1			
FH (60°-80°)	966.8	21.6			G1/1800
FVH (80°-90°)	44.0	1.0			G1/100
BL (0°-30°)	98.0	2.2	B0/110		
BM (30°-60°)	238.0	5.3	B1/1000		
BH (60°-80°)	187.0	4.2	B1/500		G1/500
BVH (80°-90°)	9.9	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	553.7	553.7	553.7	553.7	553.7	553.7	553.7	553.7	553.7	553.7	553.7
2.5°	667.2	677.2	669.7	663.5	654.7	646.0	633.5	619.8	602.4	581.2	562.5
5°	818.1	823.1	820.6	816.9	789.4	763.2	737.0	704.6	659.7	619.8	577.4
7.5°	969.0	966.5	960.3	949.1	924.1	894.2	846.8	793.2	729.6	659.7	593.6
10°	1101.2	1104.9	1100.0	1082.5	1051.3	1010.2	952.8	891.7	805.6	708.4	616.1
12.5°	1239.6	1242.1	1242.1	1204.7	1183.5	1119.9	1058.8	976.5	880.5	768.2	642.3
15°	1375.6	1370.6	1370.6	1345.6	1308.2	1237.1	1168.6	1068.8	960.3	824.3	672.2
17.5°	1505.3	1507.8	1496.5	1469.1	1432.9	1364.3	1279.5	1169.8	1038.9	891.7	703.4
20°	1633.7	1626.2	1621.3	1593.8	1555.2	1474.1	1393.0	1268.3	1131.1	967.8	747.0
22.5°	1753.4	1757.2	1744.7	1701.1	1664.9	1591.3	1499.0	1384.3	1228.4	1043.8	794.4
25°	1908.1	1895.6	1906.8	1854.5	1798.3	1711.0	1606.3	1492.8	1334.4	1137.4	853.0
27.5°	2072.7	2080.2	2074.0	2016.6	1940.5	1823.3	1713.5	1592.6	1441.7	1225.9	919.1
30°	2318.4	2314.7	2315.9	2229.8	2103.9	1964.2	1829.5	1697.3	1548.9	1334.4	996.4
32.5°	2561.6	2575.3	2541.6	2465.6	2320.9	2110.1	1945.5	1798.3	1652.4	1428.0	1075.0
35°	2757.4	2753.6	2739.9	2655.1	2511.7	2307.2	2077.7	1910.6	1762.2	1542.7	1162.3
37.5°	2804.8	2804.8	2796.0	2743.7	2648.9	2471.8	2221.1	2022.8	1874.4	1645.0	1247.1
40°	2773.6	2767.4	2762.4	2727.4	2676.3	2571.6	2372.0	2138.8	1994.1	1777.1	1340.7
42.5°	2671.3	2672.6	2666.3	2646.4	2619.0	2579.0	2465.6	2262.3	2111.4	1901.9	1432.9
45°	2534.1	2536.6	2529.2	2526.7	2512.9	2512.9	2486.8	2359.5	2222.4	2029.1	1534.0
47.5°	2358.3	2357.1	2353.3	2347.1	2374.5	2404.4	2428.1	2414.4	2320.9	2166.2	1625.0
50°	2090.2	2087.7	2098.9	2130.1	2197.4	2263.5	2333.4	2398.2	2392.0	2293.5	1734.7
52.5°	1742.2	1726.0	1738.5	1834.5	1972.9	2120.1	2218.6	2320.9	2428.1	2428.1	1843.2
55°	1218.4	1232.2	1239.6	1380.6	1653.7	1906.8	2080.2	2212.4	2414.4	2535.4	1963.0
57.5°	775.7	780.7	803.1	955.3	1275.8	1592.6	1899.4	2116.4	2363.3	2625.2	2082.7
60°	522.5	505.1	522.5	609.8	917.9	1249.6	1633.7	1995.4	2289.7	2690.0	2214.9
62.5°	369.1	367.9	372.9	424.0	654.7	939.1	1300.7	1832.0	2231.1	2693.8	2313.4
65°	298.1	289.3	293.1	321.8	439.0	688.4	954.0	1536.5	2178.7	2627.7	2362.0
67.5°	239.4	235.7	238.2	256.9	329.2	517.6	672.2	1168.6	2067.7	2515.4	2334.6
70°	195.8	197.0	198.3	217.0	261.9	391.6	480.1	801.9	1830.8	2388.2	2211.1
72.5°	169.6	169.6	170.9	183.3	219.5	310.5	362.9	521.3	1481.6	2251.0	1984.2
75°	149.7	149.7	149.7	160.9	187.1	249.4	281.8	356.7	1063.8	1996.6	1641.2
77.5°	129.7	130.9	130.9	140.9	160.9	194.6	217.0	246.9	678.4	1542.7	1242.1
80°	99.8	99.8	101.0	112.2	137.2	152.1	159.6	174.6	356.7	969.0	788.2
82.5°	69.8	71.1	71.1	72.3	92.3	93.5	86.1	87.3	129.7	321.8	299.3
85°	7.5	8.7	10.0	10.0	16.2	20.0	21.2	20.0	21.2	37.4	37.4
87.5°	0.0	0.0	0.0	0.0	1.2	2.5	2.5	3.7	3.7	3.7	3.7
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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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	553.7	553.7	553.7	553.7	553.7	553.7	553.7	553.7	553.7	553.7	553.7
2.5°	552.5	543.7	525.0	508.8	493.9	481.4	472.7	461.4	452.7	452.7	457.7
5°	556.2	536.3	497.6	461.4	432.8	405.3	380.4	364.2	351.7	344.2	344.2
7.5°	561.2	531.3	472.7	417.8	372.9	329.2	290.6	271.9	253.2	246.9	248.2
10°	571.2	528.8	450.2	379.1	311.8	256.9	219.5	199.5	189.6	184.6	184.6
12.5°	582.4	528.8	426.5	335.5	256.9	200.8	178.3	163.4	158.4	155.9	153.4
15°	597.4	531.3	406.6	289.3	209.5	169.6	153.4	144.7	139.7	137.2	137.2
17.5°	614.8	533.8	385.4	251.9	178.3	149.7	137.2	130.9	126.0	123.5	123.5
20°	637.3	540.0	364.2	218.2	155.9	137.2	126.0	119.7	114.7	113.5	112.2
22.5°	664.7	550.0	343.0	190.8	140.9	124.7	114.7	109.7	106.0	103.5	103.5
25°	697.1	562.5	326.7	170.9	129.7	116.0	107.3	101.0	97.3	96.0	96.0
27.5°	742.0	583.7	310.5	155.9	121.0	107.3	98.5	93.5	89.8	88.5	87.3
30°	784.4	609.8	303.0	152.1	114.7	99.8	93.5	87.3	83.6	82.3	81.1
32.5°	839.3	639.8	298.1	152.1	112.2	94.8	87.3	82.3	78.6	77.3	76.1
35°	897.9	674.7	298.1	157.1	113.5	91.0	82.3	77.3	73.6	71.1	71.1
37.5°	961.5	709.6	300.6	164.6	117.2	88.5	77.3	72.3	68.6	67.3	67.3
40°	1028.9	757.0	305.5	170.9	121.0	87.3	72.3	68.6	64.9	62.4	62.4
42.5°	1091.2	794.4	314.3	178.3	123.5	86.1	68.6	64.9	61.1	59.9	59.9
45°	1163.6	835.6	321.8	183.3	123.5	82.3	64.9	61.1	58.6	57.4	56.1
47.5°	1220.9	869.2	325.5	185.8	121.0	78.6	61.1	58.6	56.1	53.6	54.9
50°	1290.8	905.4	331.7	187.1	116.0	73.6	58.6	54.9	52.4	51.1	51.1
52.5°	1358.1	941.6	336.7	184.6	109.7	67.3	54.9	52.4	49.9	47.4	47.4
55°	1437.9	981.5	344.2	180.8	99.8	61.1	51.1	48.6	44.9	43.6	42.4
57.5°	1529.0	1033.9	350.4	173.3	87.3	54.9	48.6	44.9	39.9	37.4	37.4
60°	1612.5	1093.7	355.4	154.6	76.1	51.1	44.9	41.2	36.2	34.9	34.9
62.5°	1702.3	1156.1	355.4	122.2	64.9	46.1	42.4	38.7	33.7	32.4	32.4
65°	1764.7	1212.2	344.2	91.0	54.9	43.6	41.2	36.2	31.2	29.9	29.9
67.5°	1782.1	1247.1	313.0	64.9	47.4	41.2	38.7	33.7	29.9	27.4	27.4
70°	1726.0	1219.7	255.7	49.9	41.2	37.4	34.9	31.2	27.4	26.2	26.2
72.5°	1565.1	1114.9	190.8	42.4	36.2	34.9	32.4	28.7	26.2	24.9	24.9
75°	1310.7	926.6	134.7	37.4	33.7	31.2	28.7	26.2	23.7	23.7	23.7
77.5°	992.7	669.7	83.6	33.7	28.7	28.7	26.2	23.7	22.4	21.2	21.2
80°	641.0	422.8	47.4	23.7	20.0	21.2	18.7	16.2	16.2	15.0	15.0
82.5°	271.9	167.1	24.9	13.7	10.0	8.7	6.2	6.2	5.0	5.0	5.0
85°	27.4	10.0	5.0	3.7	3.7	2.5	2.5	2.5	2.5	1.2	1.2
87.5°	3.7	3.7	3.7	2.5	2.5	2.5	1.2	1.2	1.2	1.2	1.2
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

Streetworks

Report Number: SP1-2407-157-5

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-740-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-740-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-5  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry:  $4\pi$   
 Issue Date: 08/20/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-SA-40-740-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 3915  
 CIE u': 0.2262  
 CIE v': 0.5044  
 Duv: 0.0010  
 CIE x: 0.3850  
 CIE y: 0.3816  
 CIE z: 0.2334  
 Peak Wavelength (nm): 449  
 Dominant Wavelength (nm): 578  
 Purity: 30.05482  
 R<sub>f</sub>: 73.2  
 R<sub>g</sub>: 93.9

CRI (Ra):	71.0		
R1:	67.6	R9:	-38.4
R2:	78.3	R10:	48.9
R3:	87.1	R11:	65.3
R4:	69.7	R12:	40.4
R5:	67.4	R13:	69.3
R6:	69.3	R14:	92.6
R7:	79.7	R15:	59.9
R8:	48.7		



**Test Conditions**

Stabilization Time: 21M  
 Operation Time: 1H 21M  
 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



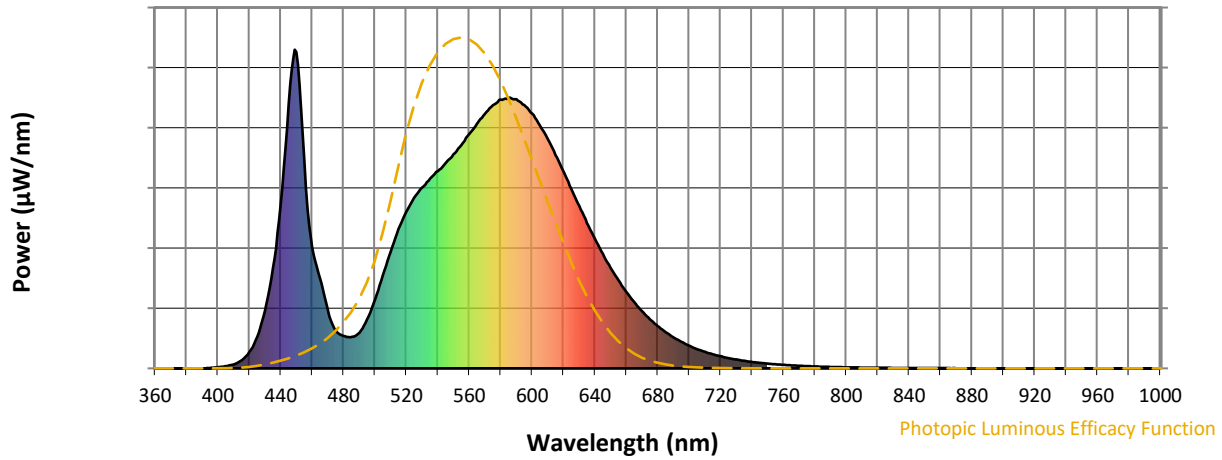
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 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	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



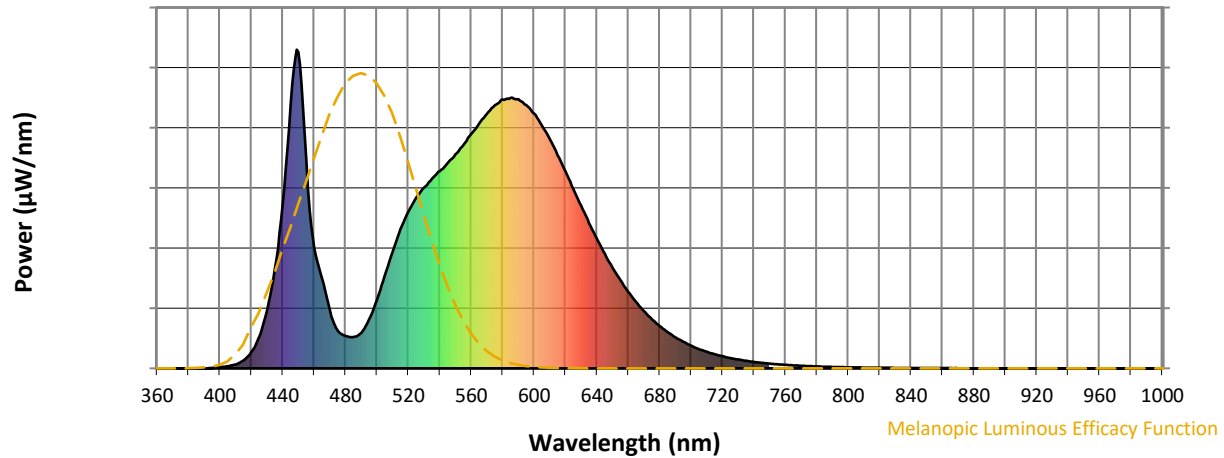
**Scotopic Lumens: NR**

**S/P: 1.49**

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	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

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**Melanopic Flux vs. Wavelength**



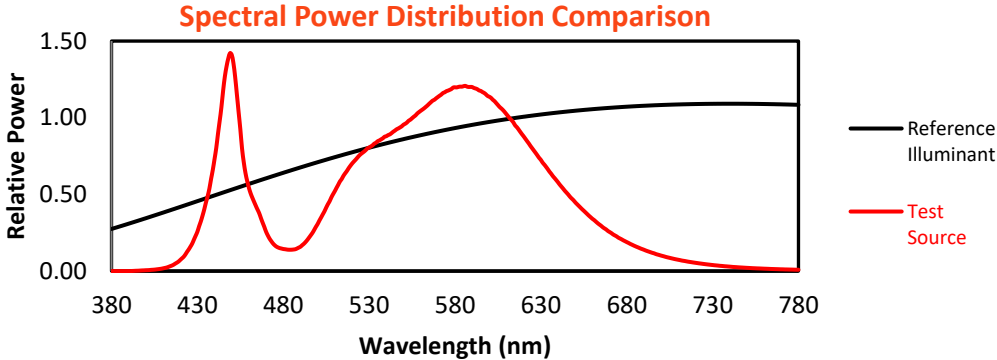
**Melanopic Lumens: NR**

**M/P: 2.88**

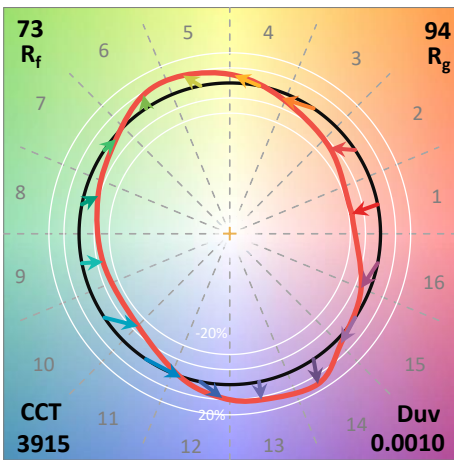
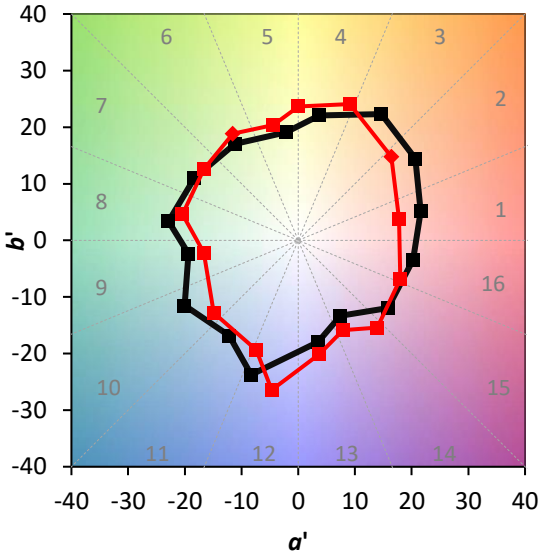
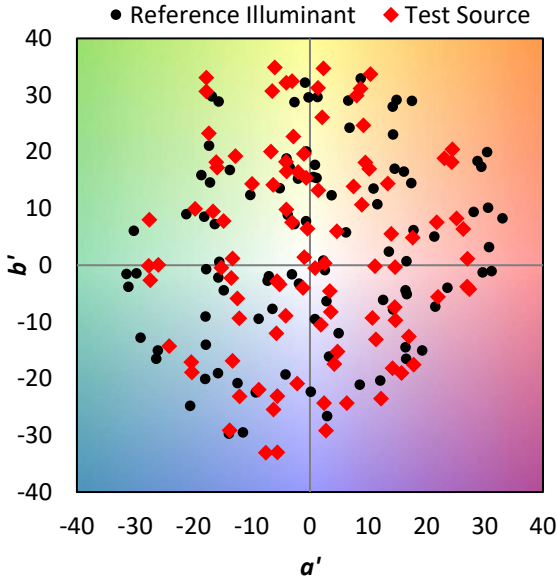
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

**Summary**

$R_f = 73.2$   
 $R_g = 93.9$   
 $CIE R_a = 71.0$   
 $R_g = -38.4$



**Color Vector Graphics**



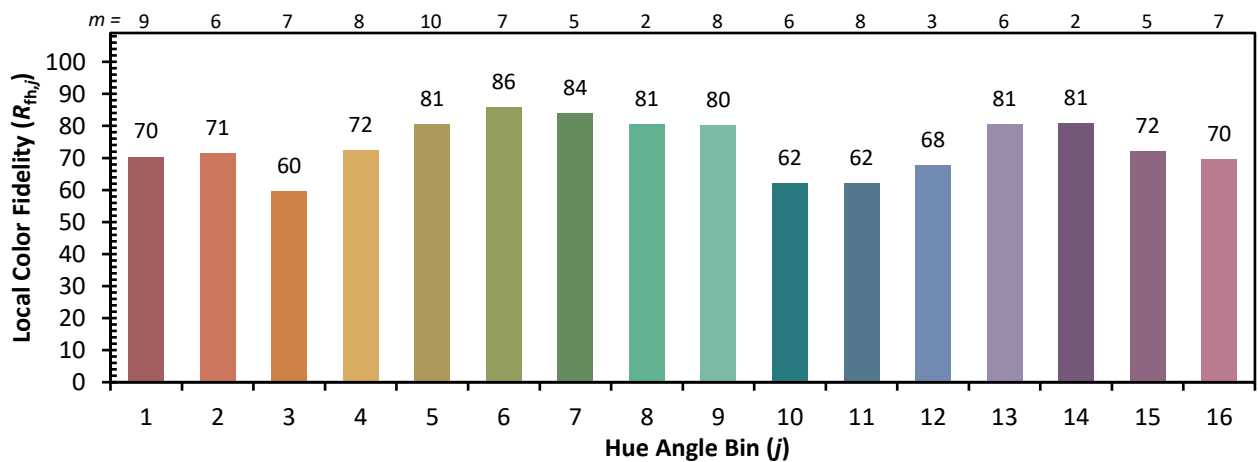
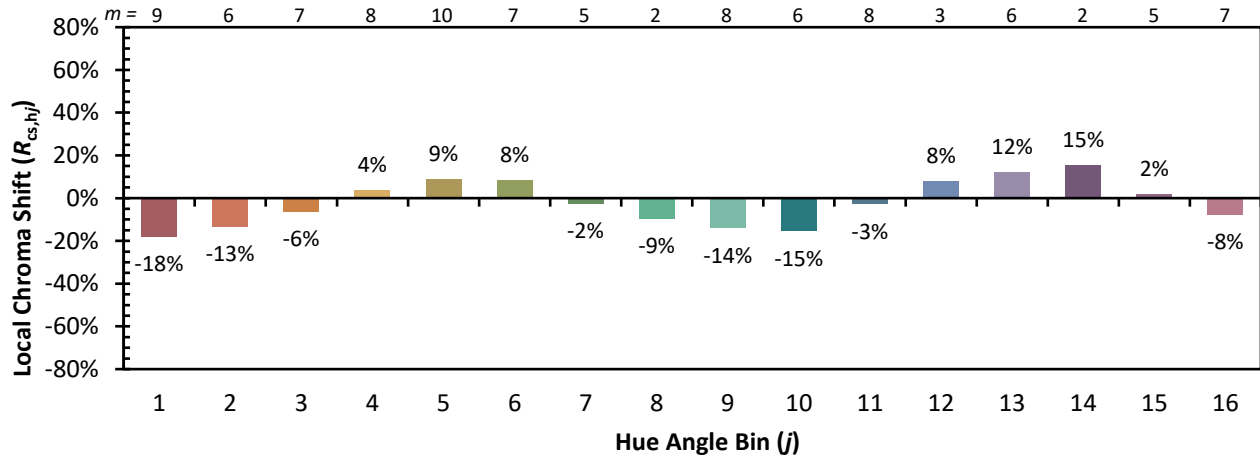


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 85	CES26 = 61	CES51 = 88	CES76 = 50
CES02 = 61	CES27 = 88	CES52 = 87	CES77 = 69
CES03 = 30	CES28 = 81	CES53 = 77	CES78 = 53
CES04 = 70	CES29 = 65	CES54 = 84	CES79 = 81
CES05 = 47	CES30 = 81	CES55 = 83	CES80 = 78
CES06 = 50	CES31 = 69	CES56 = 73	CES81 = 77
CES07 = 40	CES32 = 60	CES57 = 72	CES82 = 91
CES08 = 39	CES33 = 76	CES58 = 73	CES83 = 89
CES09 = 29	CES34 = 70	CES59 = 85	CES84 = 86
CES10 = 74	CES35 = 83	CES60 = 89	CES85 = 77
CES11 = 57	CES36 = 91	CES61 = 81	CES86 = 71
CES12 = 63	CES37 = 79	CES62 = 85	CES87 = 76
CES13 = 42	CES38 = 92	CES63 = 72	CES88 = 80
CES14 = 74	CES39 = 96	CES64 = 64	CES89 = 70
CES15 = 71	CES40 = 91	CES65 = 61	CES90 = 79
CES16 = 46	CES41 = 93	CES66 = 57	CES91 = 74
CES17 = 49	CES42 = 80	CES67 = 54	CES92 = 57
CES18 = 56	CES43 = 76	CES68 = 63	CES93 = 74
CES19 = 72	CES44 = 99	CES69 = 73	CES94 = 51
CES20 = 65	CES45 = 85	CES70 = 55	CES95 = 65
CES21 = 86	CES46 = 82	CES71 = 48	CES96 = 76
CES22 = 78	CES47 = 86	CES72 = 83	CES97 = 84
CES23 = 92	CES48 = 77	CES73 = 45	CES98 = 75
CES24 = 91	CES49 = 80	CES74 = 93	CES99 = 62
CES25 = 72	CES50 = 88	CES75 = 51	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)