

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: P867997

Luminaire Tested: **MEM2-HSN-SA-60-727-U-T2U-HSS**

Issue Date: 08/21/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P867997  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-SA-60-727-U-T2U-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 60W 70CRI 2700K  
FIXTURE w/ TYPE II URBAN DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (20) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

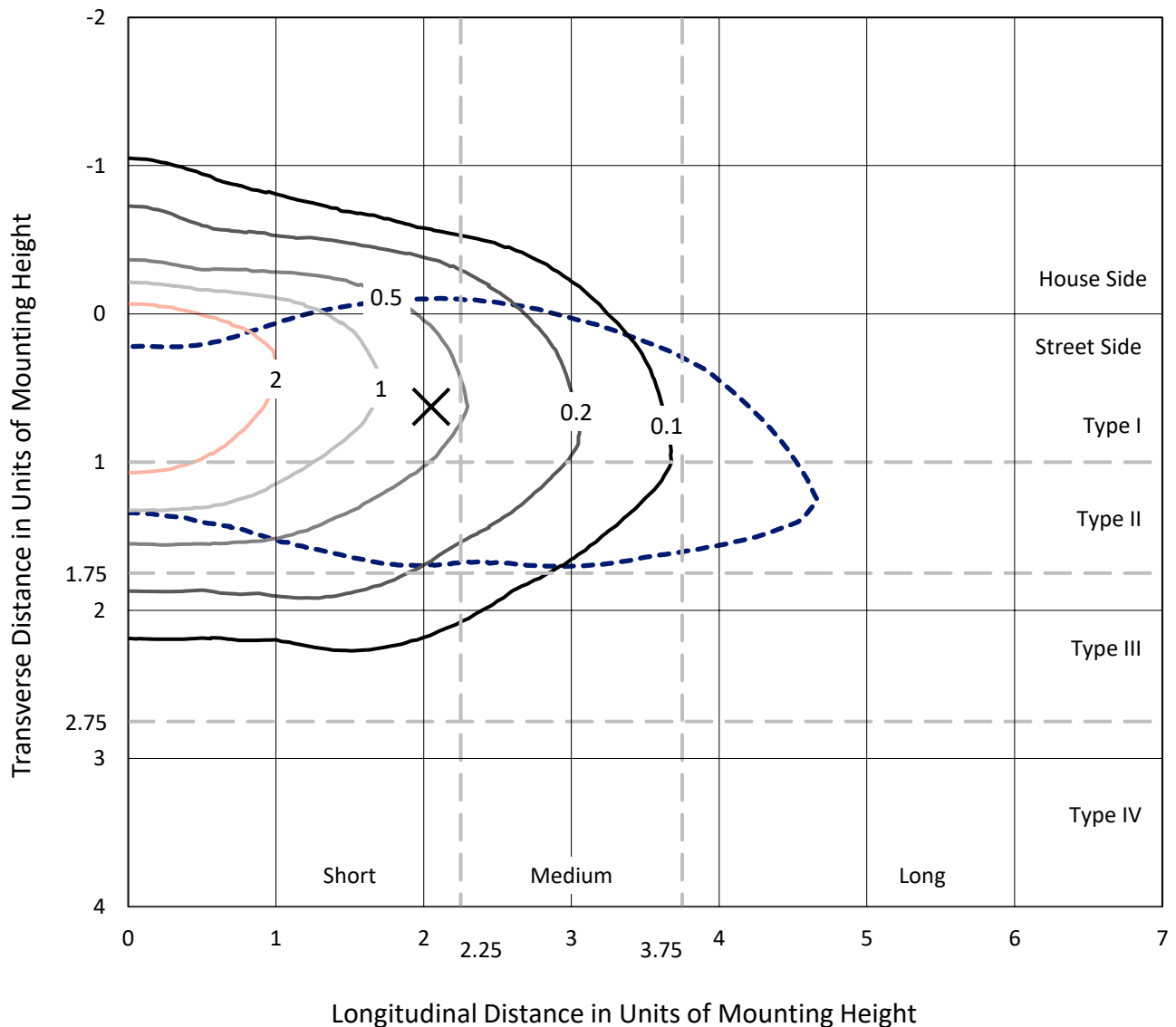
Lumens per Lamp: N/A  
Luminaire Lumens: 5844 lumens  
Efficiency: N/A  
Efficacy: 95.8 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 61  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 9.89%  
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

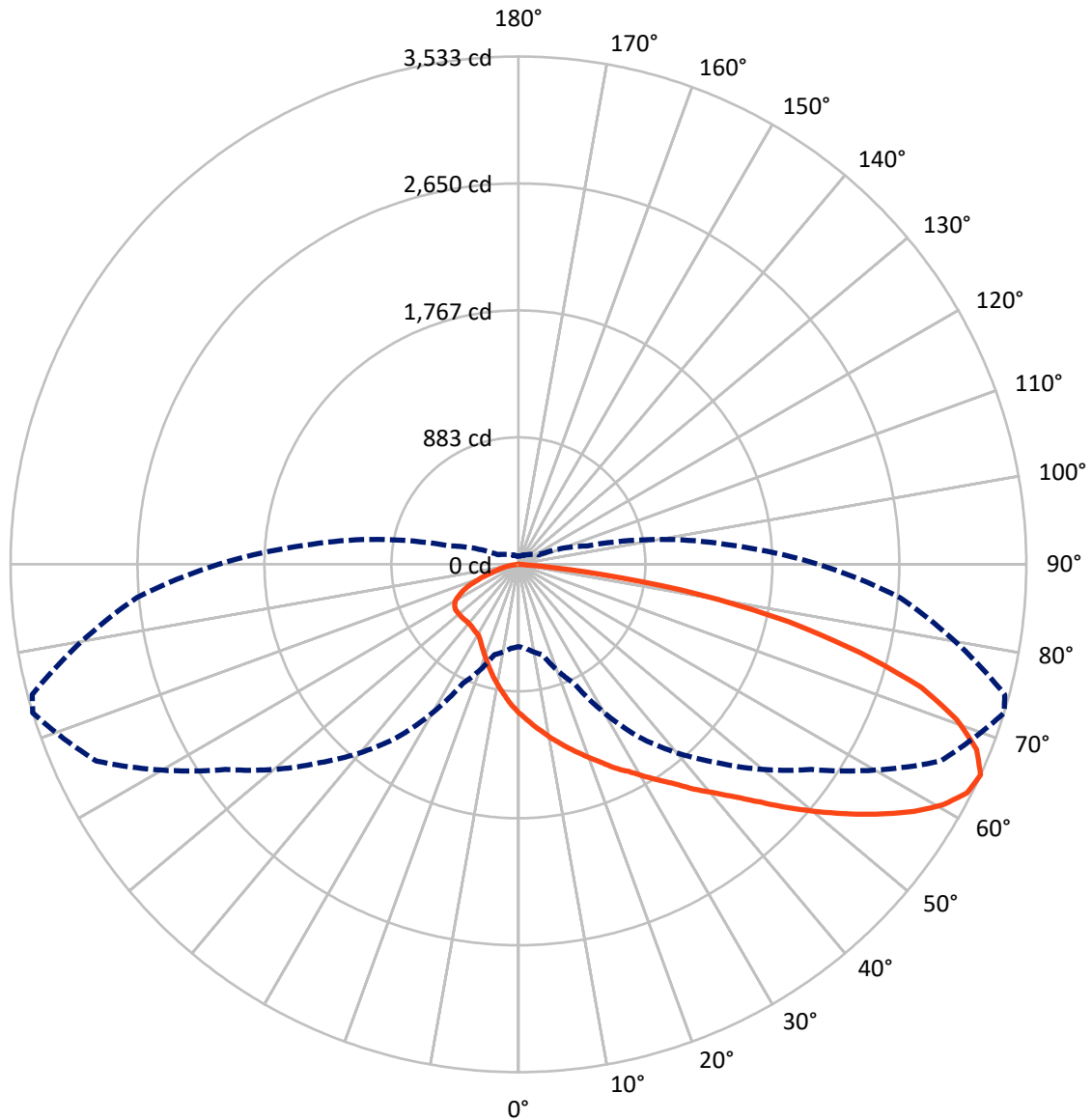
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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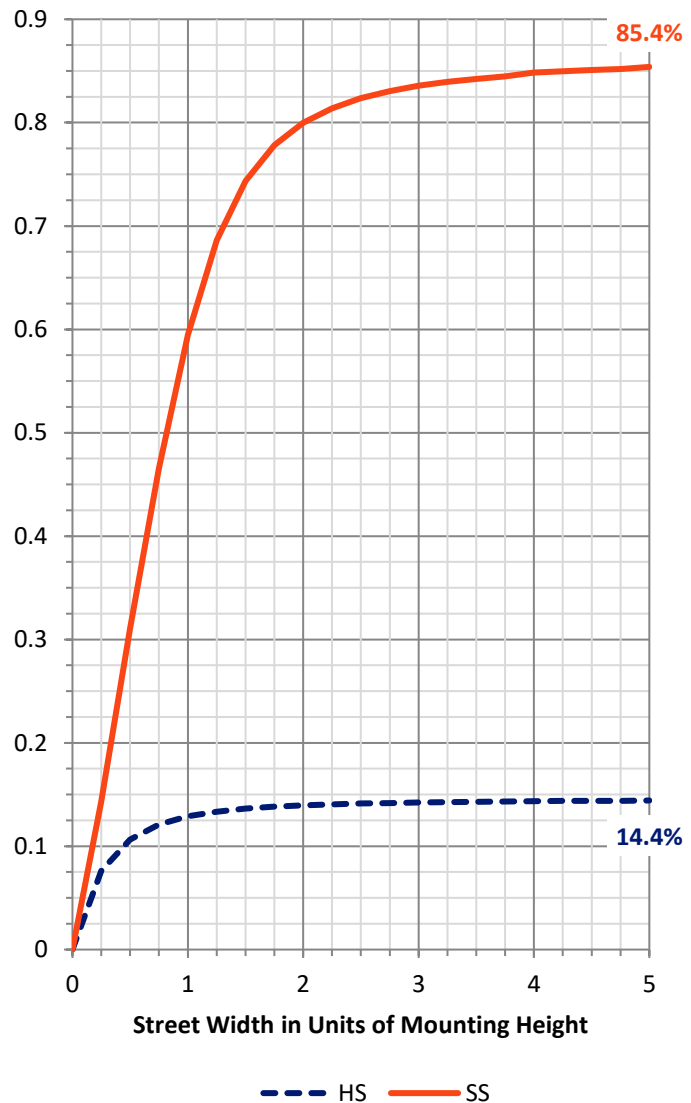
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	849.8	0.0	849.8
	% Fixture	14.5	0.0	14.5
<b>Street Side</b>	Lumens	4994.2	0.0	4994.2
	% Fixture	85.5	0.0	85.5
<b>Total</b>	Lumens	5844.0	0.0	5844.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.1	1.7
10°-20°	304.1	5.2
20°-30°	509.4	8.7
30°-40°	768.3	13.1
40°-50°	1085.6	18.6
50°-60°	1221.6	20.9
60°-70°	1095.4	18.7
70°-80°	666.2	11.4
80°-90°	93.2	1.6
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°	5844.0	100.0
0°-180°	5844.0	100.0



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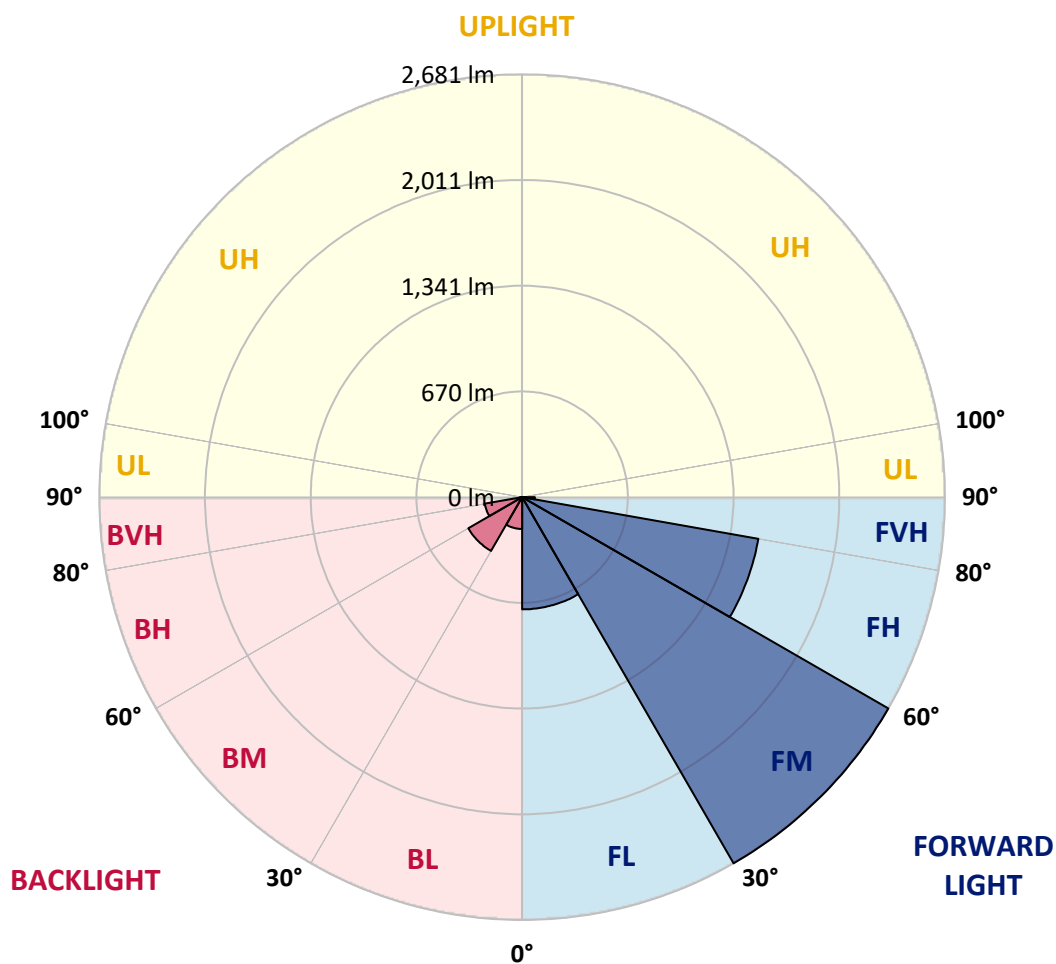
CATALOG NUMBER: MEM2-HSN-SA-60-727-U-T2U-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	711.7	12.2			
FM (30°-60°)	2681.5	45.9			
FH (60°-80°)	1520.9	26.0			G1/1800
FVH (80°-90°)	80.1	1.4			G1/100
BL (0°-30°)	201.9	3.5	B1/500		
BM (30°-60°)	394.1	6.7	B1/1000		
BH (60°-80°)	240.7	4.1	B1/500		G1/500
BVH (80°-90°)	13.1	0.2			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7
2.5°	1196.6	1189.8	1179.4	1170.8	1155.4	1134.7	1117.5	1095.2	1079.7	1074.6	1052.2
5°	1370.3	1361.7	1349.6	1329.0	1287.8	1263.7	1219.0	1167.4	1126.1	1117.5	1066.0
7.5°	1549.1	1545.6	1518.1	1487.2	1437.3	1384.0	1315.3	1234.5	1174.3	1160.5	1081.4
10°	1700.4	1684.9	1669.4	1640.2	1586.9	1511.3	1421.9	1310.1	1225.9	1203.5	1096.9
12.5°	1791.5	1786.3	1772.6	1738.2	1686.6	1621.3	1514.7	1384.0	1275.7	1244.8	1112.4
15°	1858.6	1863.7	1850.0	1827.6	1774.3	1712.4	1609.3	1461.4	1329.0	1292.9	1129.6
17.5°	1922.2	1918.7	1917.0	1891.2	1843.1	1781.2	1676.3	1525.0	1382.3	1342.8	1146.8
20°	1958.3	1960.0	1956.6	1946.2	1899.8	1839.6	1741.6	1600.7	1440.8	1396.1	1169.1
22.5°	1977.2	1984.1	1990.9	1989.2	1951.4	1905.0	1803.5	1660.8	1500.9	1454.5	1196.6
25°	1989.2	1994.4	2009.9	2030.5	1996.1	1958.3	1872.3	1733.0	1571.4	1518.1	1229.3
27.5°	1999.5	2006.4	2025.3	2056.3	2028.8	2006.4	1932.5	1794.9	1631.6	1583.5	1267.1
30°	2066.6	2075.2	2075.2	2090.7	2059.7	2054.6	1999.5	1868.9	1707.3	1655.7	1315.3
32.5°	2243.7	2226.5	2195.5	2180.1	2106.1	2107.9	2064.9	1942.8	1788.1	1736.5	1375.4
35°	2396.7	2396.7	2358.9	2309.0	2190.4	2166.3	2140.5	2040.8	1875.7	1825.9	1454.5
37.5°	2544.6	2546.3	2506.7	2463.7	2327.9	2242.0	2228.2	2135.4	1984.1	1925.6	1537.0
40°	2637.4	2647.7	2637.4	2604.7	2474.1	2374.3	2314.2	2242.0	2087.2	2042.5	1631.6
42.5°	2652.9	2673.5	2711.3	2721.6	2580.7	2493.0	2424.2	2352.0	2211.0	2161.2	1739.9
45°	2613.3	2620.2	2704.4	2716.5	2659.7	2587.5	2541.1	2480.9	2358.9	2315.9	1860.3
47.5°	2505.0	2491.3	2520.5	2625.4	2647.7	2644.3	2656.3	2627.1	2530.8	2475.8	1992.7
50°	2272.9	2278.1	2372.6	2499.9	2577.2	2664.9	2742.3	2774.9	2704.4	2649.4	2135.4
52.5°	1850.0	1874.0	2054.6	2355.4	2489.5	2651.2	2804.2	2914.2	2885.0	2831.7	2276.3
55°	1519.9	1556.0	1736.5	2123.3	2369.2	2584.1	2840.3	3060.3	3065.5	3024.2	2405.3
57.5°	1189.8	1219.0	1409.8	1764.0	2197.3	2479.2	2845.4	3185.9	3244.3	3196.2	2518.8
60°	931.9	952.5	1064.2	1470.0	1985.8	2329.6	2807.6	3285.6	3395.6	3359.5	2616.8
62.5°	706.6	722.1	821.8	1162.2	1726.2	2154.3	2680.4	3321.7	3502.2	3467.8	2671.8
65°	572.5	586.3	651.6	912.9	1470.0	1951.4	2487.8	3239.1	3533.1	3502.2	2664.9
67.5°	467.6	472.8	526.1	711.8	1243.0	1722.7	2205.9	3024.2	3438.6	3436.9	2585.8
70°	378.2	392.0	436.7	567.4	1033.3	1459.7	1877.5	2687.3	3234.0	3251.2	2427.6
72.5°	321.5	324.9	364.5	469.4	842.5	1184.6	1554.2	2298.7	2933.1	2946.9	2180.1
75°	271.6	276.8	306.0	380.0	684.3	940.5	1249.9	1856.8	2455.2	2513.6	1836.2
77.5°	233.8	235.5	256.2	312.9	486.6	706.6	916.4	1392.6	1922.2	1963.4	1442.5
80°	184.0	187.4	209.8	247.6	338.7	459.1	632.7	952.5	1284.3	1330.7	998.9
82.5°	86.0	96.3	101.4	135.8	177.1	226.9	299.2	397.2	581.1	579.4	465.9
85°	8.6	6.9	6.9	10.3	15.5	15.5	18.9	22.4	44.7	53.3	41.3
87.5°	0.0	0.0	0.0	1.7	3.4	3.4	3.4	5.2	5.2	5.2	5.2
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: MEM2-HSN-SA-60-727-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7	1036.7
2.5°	1041.9	1026.4	998.9	973.1	955.9	942.2	919.8	906.1	895.8	882.0	880.3
5°	1038.5	1010.9	955.9	909.5	864.8	827.0	787.4	763.4	737.6	725.5	735.9
7.5°	1041.9	997.2	911.2	840.7	773.7	713.5	661.9	629.3	605.2	593.2	594.9
10°	1043.6	985.2	873.4	775.4	689.4	618.9	560.5	515.8	486.6	479.7	471.1
12.5°	1040.2	969.7	835.6	711.8	608.6	531.3	462.5	428.1	398.9	385.1	385.1
15°	1043.6	957.6	796.0	653.3	536.4	447.0	388.6	350.7	333.5	321.5	323.2
17.5°	1043.6	947.3	758.2	596.6	465.9	383.4	330.1	299.2	282.0	275.1	273.4
20°	1055.6	938.7	722.1	543.3	404.0	326.7	283.7	259.6	245.9	239.0	235.5
22.5°	1064.2	931.9	689.4	491.7	352.5	285.4	249.3	226.9	216.6	213.2	213.2
25°	1079.7	930.1	660.2	441.9	311.2	254.5	221.8	204.6	196.0	192.6	192.6
27.5°	1102.1	933.6	632.7	398.9	280.2	223.5	199.4	185.7	180.5	178.8	177.1
30°	1134.7	949.0	615.5	366.2	251.0	204.6	182.2	173.6	170.2	168.5	168.5
32.5°	1177.7	976.6	608.6	349.0	233.8	189.1	170.2	163.3	159.9	159.9	158.2
35°	1231.0	1007.5	603.5	333.5	221.8	178.8	161.6	154.7	153.0	153.0	153.0
37.5°	1294.6	1040.2	594.9	323.2	214.9	170.2	154.7	147.9	147.9	147.9	147.9
40°	1365.1	1088.3	593.2	316.3	209.8	165.1	147.9	141.0	141.0	141.0	141.0
42.5°	1444.2	1139.9	591.4	311.2	206.3	161.6	141.0	134.1	134.1	134.1	134.1
45°	1540.5	1205.2	594.9	307.8	206.3	158.2	135.8	127.2	125.5	125.5	125.5
47.5°	1635.0	1267.1	598.3	304.3	202.9	153.0	128.9	120.4	118.6	116.9	116.9
50°	1736.5	1330.7	598.3	300.9	199.4	147.9	123.8	111.8	110.0	108.3	108.3
52.5°	1836.2	1384.0	600.0	295.7	190.8	139.3	115.2	104.9	101.4	99.7	98.0
55°	1932.5	1440.8	601.8	287.1	180.5	130.7	110.0	98.0	92.8	89.4	89.4
57.5°	2004.7	1487.2	593.2	269.9	166.8	122.1	101.4	89.4	82.5	79.1	79.1
60°	2073.5	1516.4	577.7	244.1	153.0	113.5	94.6	80.8	73.9	70.5	70.5
62.5°	2101.0	1521.6	541.6	199.4	135.8	104.9	86.0	73.9	68.8	67.1	67.1
65°	2085.5	1499.2	493.4	158.2	120.4	94.6	79.1	68.8	61.9	56.7	56.7
67.5°	2001.3	1421.9	428.1	125.5	104.9	86.0	72.2	61.9	55.0	49.9	49.9
70°	1841.4	1298.1	333.5	99.7	91.1	75.6	65.3	56.7	49.9	44.7	44.7
72.5°	1605.8	1126.1	242.4	84.2	79.1	67.1	58.5	51.6	44.7	41.3	41.3
75°	1323.9	868.2	171.9	72.2	70.5	60.2	53.3	46.4	41.3	37.8	37.8
77.5°	993.8	605.2	134.1	63.6	61.9	55.0	48.1	43.0	37.8	36.1	34.4
80°	661.9	374.8	101.4	48.1	46.4	43.0	39.5	36.1	30.9	27.5	27.5
82.5°	295.7	158.2	51.6	27.5	24.1	20.6	17.2	12.0	12.0	10.3	10.3
85°	30.9	20.6	10.3	6.9	6.9	5.2	5.2	5.2	3.4	3.4	3.4
87.5°	5.2	5.2	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7
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: SP1-2407-157-3

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-30-727-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-30-727-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-3  
 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-30-727-U-5WQ-2**  
 Description: Epic Modern Light Square 30W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 2747  
 CIE u': 0.2606  
 CIE v': 0.5257  
 Duv: -0.0005  
 CIE x: 0.4552  
 CIE y: 0.4082  
 CIE z: 0.1366  
 Peak Wavelength (nm): 597  
 Dominant Wavelength (nm): 584  
 Purity: 59.16856  
 R<sub>f</sub>: 75.5  
 R<sub>g</sub>: 93.6

CRI (Ra):	71.7		
R1:	68.1	R9:	-35.3
R2:	83.9	R10:	64.2
R3:	94.7	R11:	61.7
R4:	66.3	R12:	53.9
R5:	67.4	R13:	71.2
R6:	78.7	R14:	97.6
R7:	75.0	R15:	59.3
R8:	39.4		



**Test Conditions**

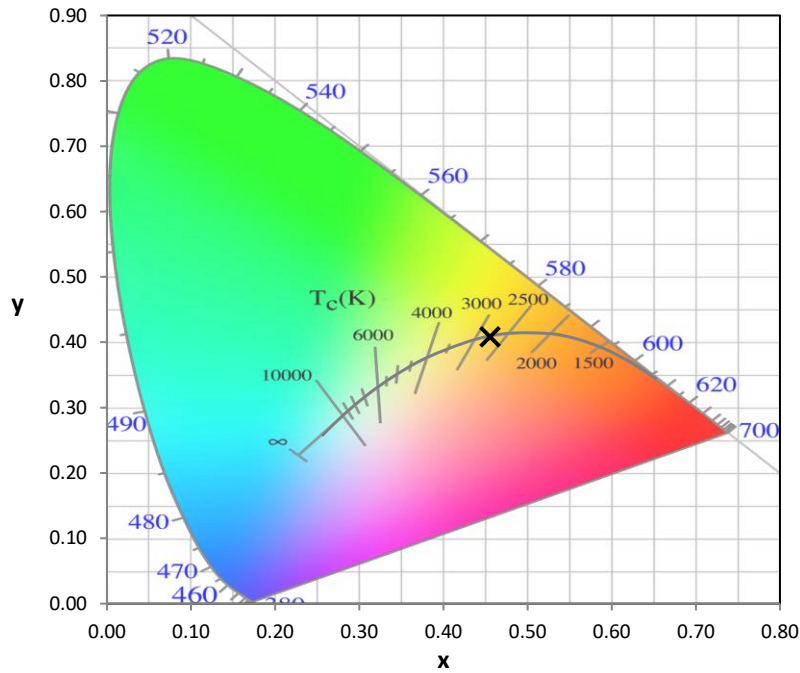
Stabilization Time: 22M  
 Operation Time: 1H 22M  
 Sphere Temperature (°C): 24.2

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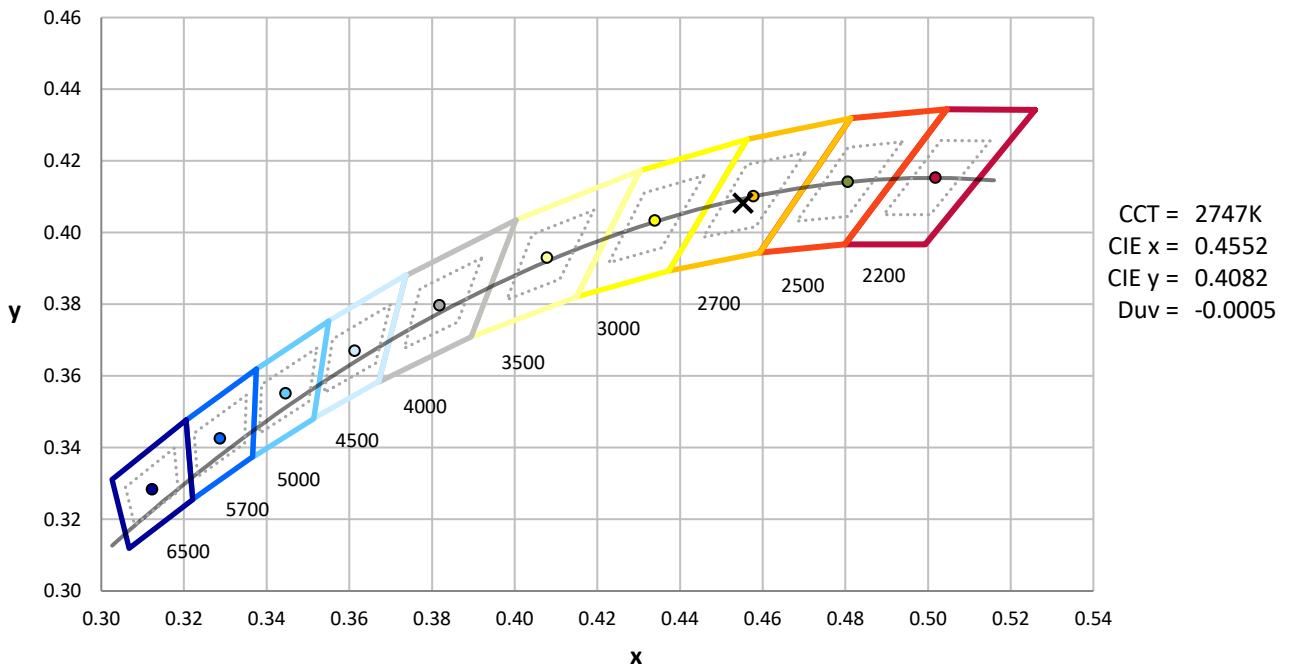
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	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 2700K 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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-3

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.13**

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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.04

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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

**Summary**

$R_f = 75.5$   
 $R_g = 93.6$   
 $CIE R_a = 71.7$   
 $R_g = -35.3$



**Color Vector Graphics**



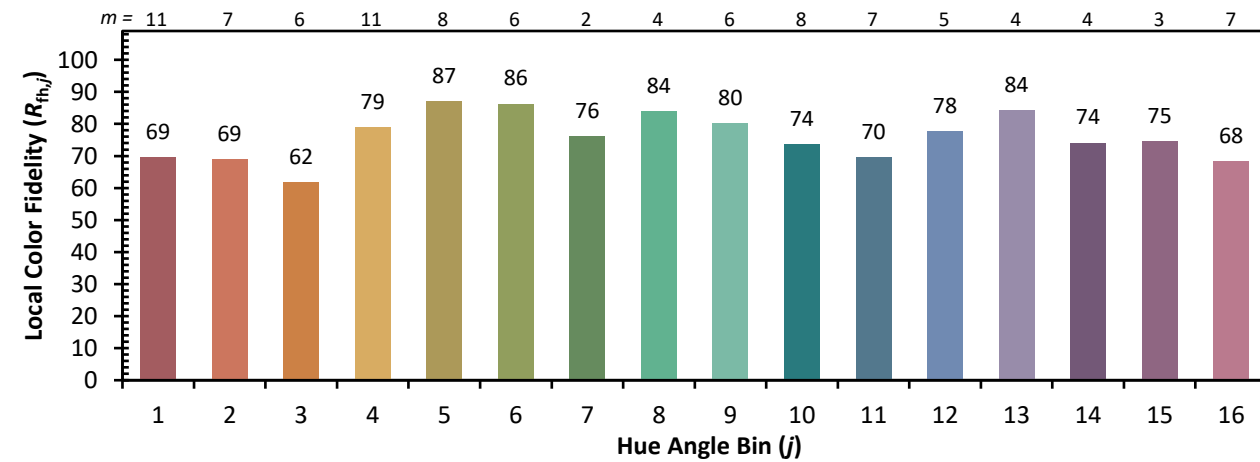
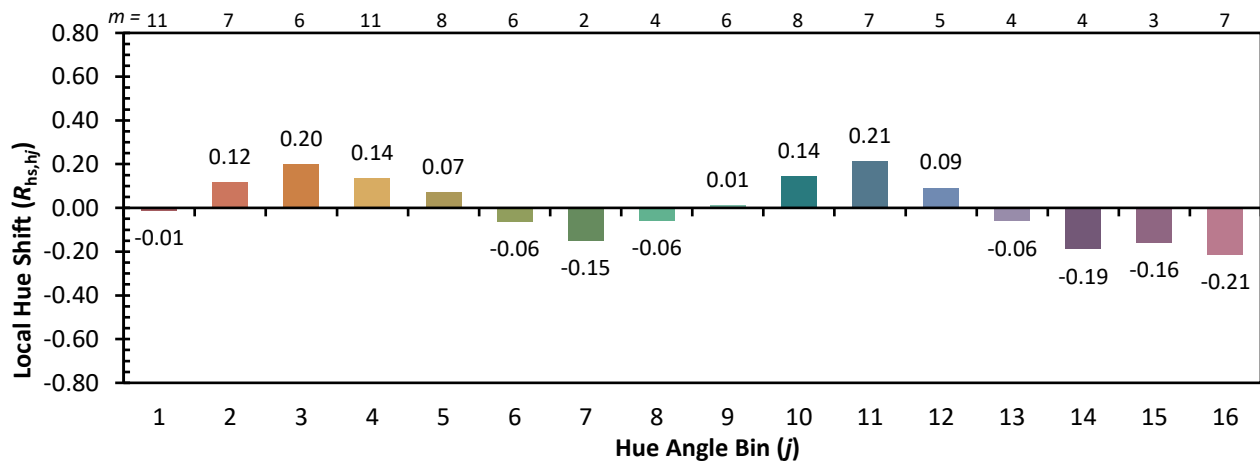
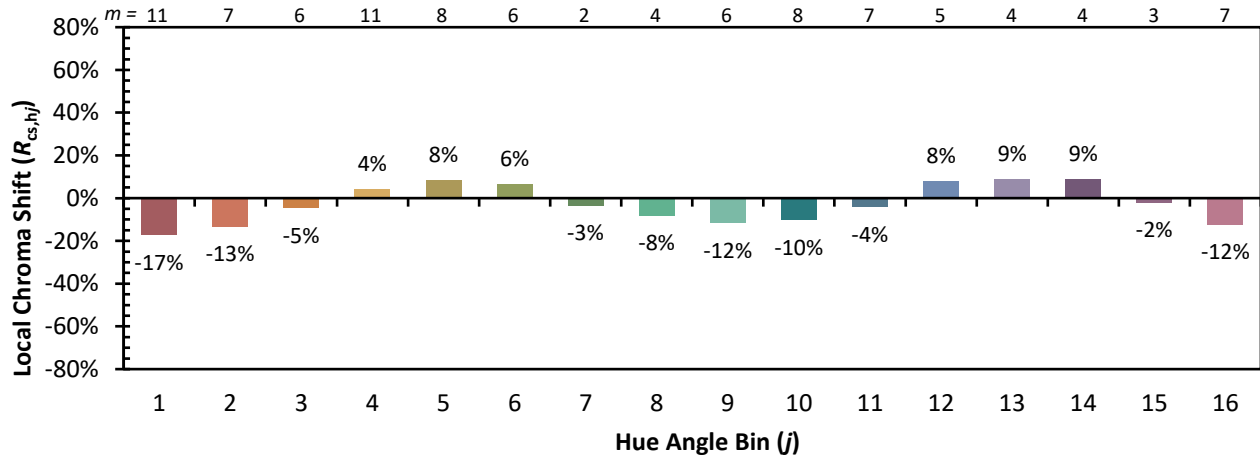


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 86	CES26 = 68	CES51 = 87	CES76 = 63
CES02 = 63	CES27 = 90	CES52 = 85	CES77 = 79
CES03 = 31	CES28 = 87	CES53 = 78	CES78 = 66
CES04 = 71	CES29 = 71	CES54 = 86	CES79 = 87
CES05 = 50	CES30 = 85	CES55 = 84	CES80 = 85
CES06 = 52	CES31 = 74	CES56 = 75	CES81 = 67
CES07 = 42	CES32 = 66	CES57 = 75	CES82 = 93
CES08 = 41	CES33 = 80	CES58 = 76	CES83 = 91
CES09 = 29	CES34 = 79	CES59 = 85	CES84 = 89
CES10 = 77	CES35 = 89	CES60 = 90	CES85 = 72
CES11 = 60	CES36 = 93	CES61 = 81	CES86 = 59
CES12 = 66	CES37 = 88	CES62 = 91	CES87 = 77
CES13 = 43	CES38 = 93	CES63 = 77	CES88 = 79
CES14 = 74	CES39 = 97	CES64 = 67	CES89 = 65
CES15 = 72	CES40 = 93	CES65 = 66	CES90 = 80
CES16 = 48	CES41 = 93	CES66 = 63	CES91 = 80
CES17 = 51	CES42 = 89	CES67 = 61	CES92 = 55
CES18 = 57	CES43 = 78	CES68 = 68	CES93 = 72
CES19 = 73	CES44 = 99	CES69 = 78	CES94 = 48
CES20 = 67	CES45 = 85	CES70 = 63	CES95 = 66
CES21 = 88	CES46 = 81	CES71 = 61	CES96 = 76
CES22 = 80	CES47 = 86	CES72 = 86	CES97 = 81
CES23 = 92	CES48 = 74	CES73 = 56	CES98 = 76
CES24 = 91	CES49 = 79	CES74 = 93	CES99 = 64
CES25 = 73	CES50 = 86	CES75 = 66	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)