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: P879563

Luminaire Tested: **MEM2-HTN-VA-130-740-U-MQ**

Issue Date: 10/01/2024

Report Generated By 670245763

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

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P879563
Test Lab:	INNOVATION CENTER(G3)
Issue Date:	10/01/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	STREETWORKS
Catalog Number:	MEM2-HTN-VA-130-740-U-MQ
Description:	EPIC MODERN TALL HOUSING 130W 70CRI 4000K VISUAL COMFORT FIXTURE w/ TYPE V MEDIUM DISTRIBUTION OPTIC
Light Source:	(1) 4000K CCT, 70 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	15560.2 lumens
Efficiency:	N/A
Efficacy:	119.7 lumens/watt
Luminous Opening:	Circular (Dia: 1.12' x H: 0')
IES Classification:	Type V - Short
BUG Rating:	B4 - U0 - G3

Input Watts (W):	130
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.995
Total Harmonic Distortion (THDi):	8.1%
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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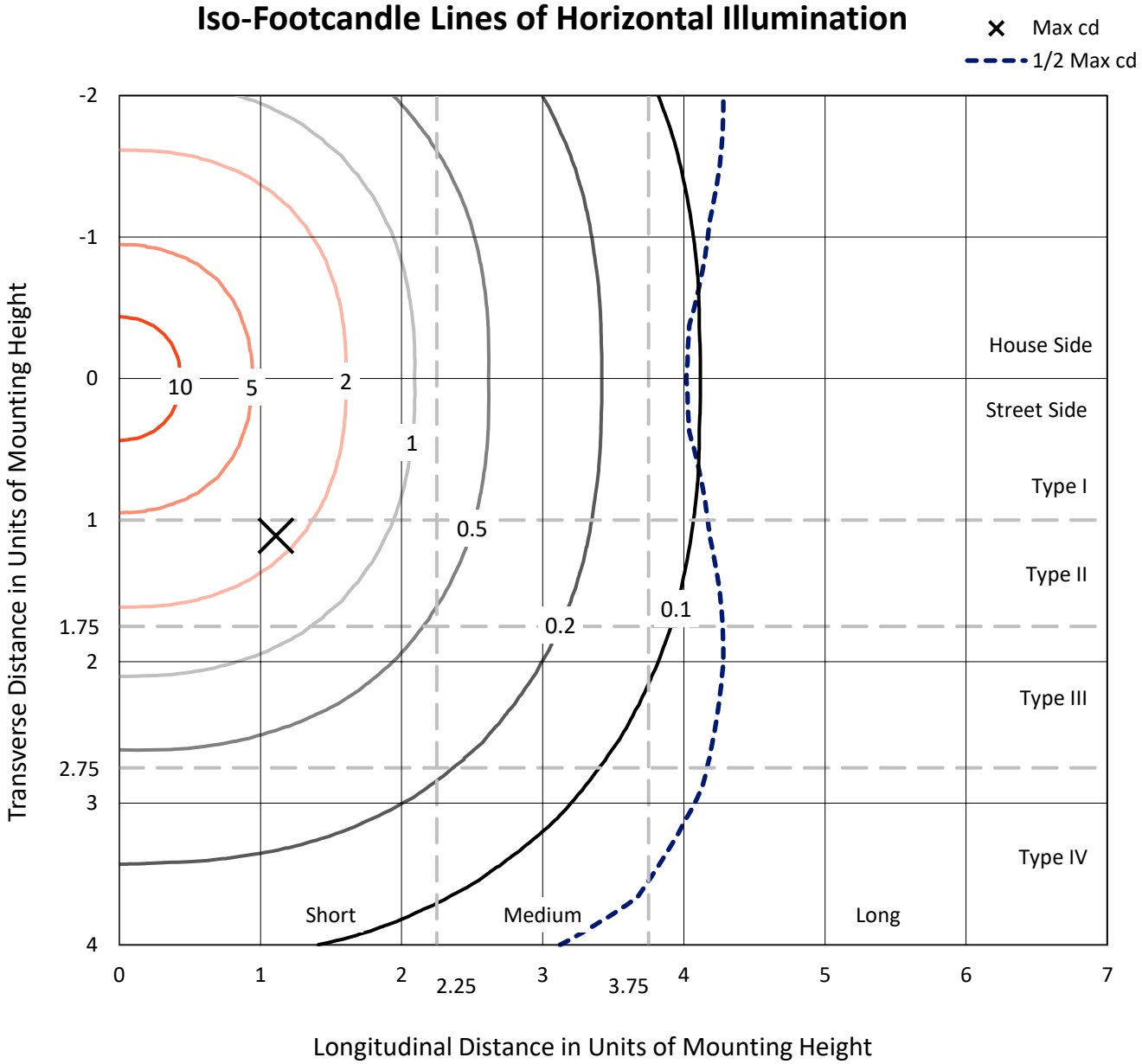
Scaled Data Report

REPORT NUMBER: P879563
CATALOG NUMBER: MEM2-HTN-VA-130-740-U-MQ

Iso-Footcandle Lines of Horizontal Illumination



Based on 15 foot mounting height. Maximum calculated value = 14 fc
Type V - Short - N/A

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REPORT NUMBER: P879563
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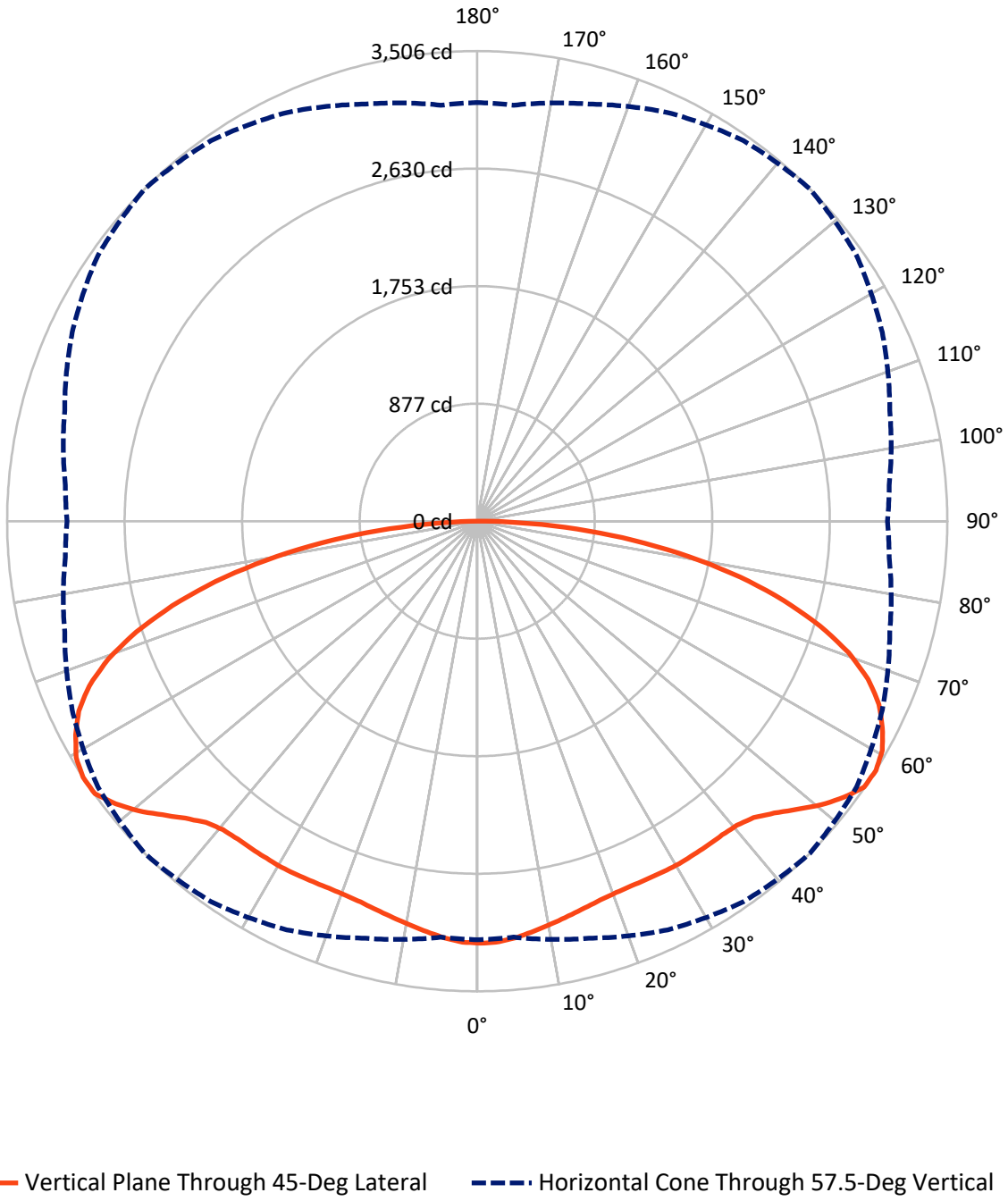
Luminous Intensity Polar Plot



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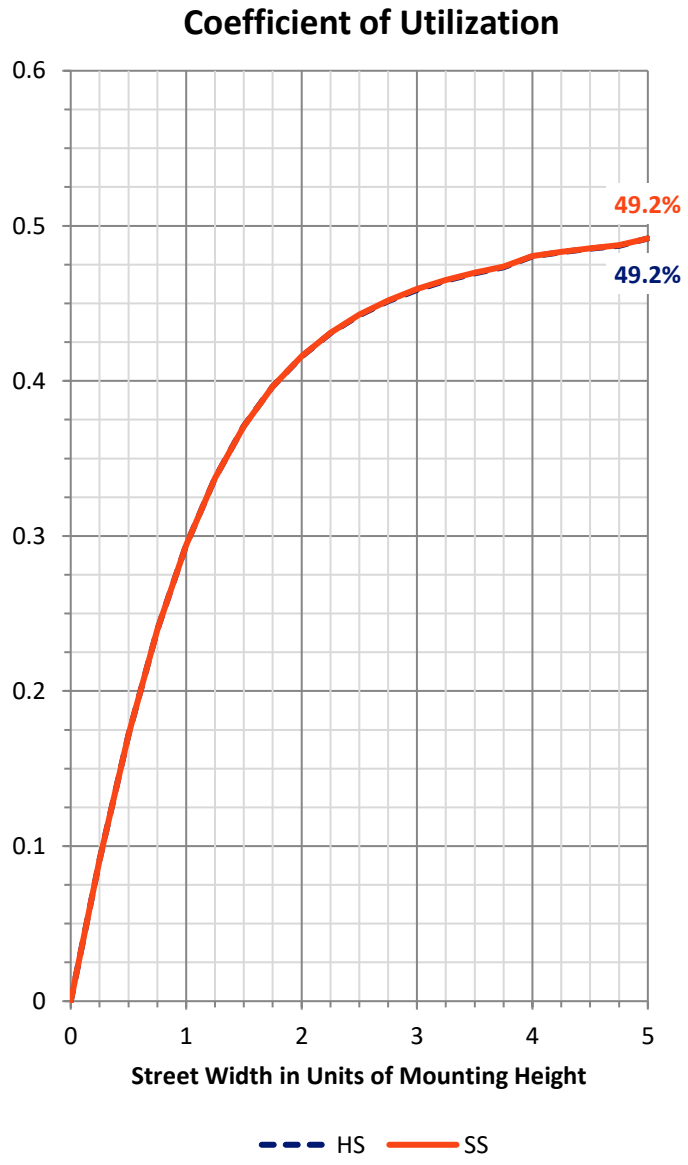
REPORT NUMBER: P879563
CATALOG NUMBER: MEM2-HTN-VA-130-740-U-MQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7780.1	0.0	7780.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7780.1	0.0	7780.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	15560.2	0.0	15560.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.5	1.9
10°-20°	847.0	5.4
20°-30°	1361.2	8.7
30°-40°	1845.1	11.9
40°-50°	2356.5	15.1
50°-60°	2937.2	18.9
60°-70°	2992.9	19.2
70°-80°	2217.6	14.3
80°-90°	707.2	4.5
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°	15560.2	100.0
0°-180°	15560.2	100.0



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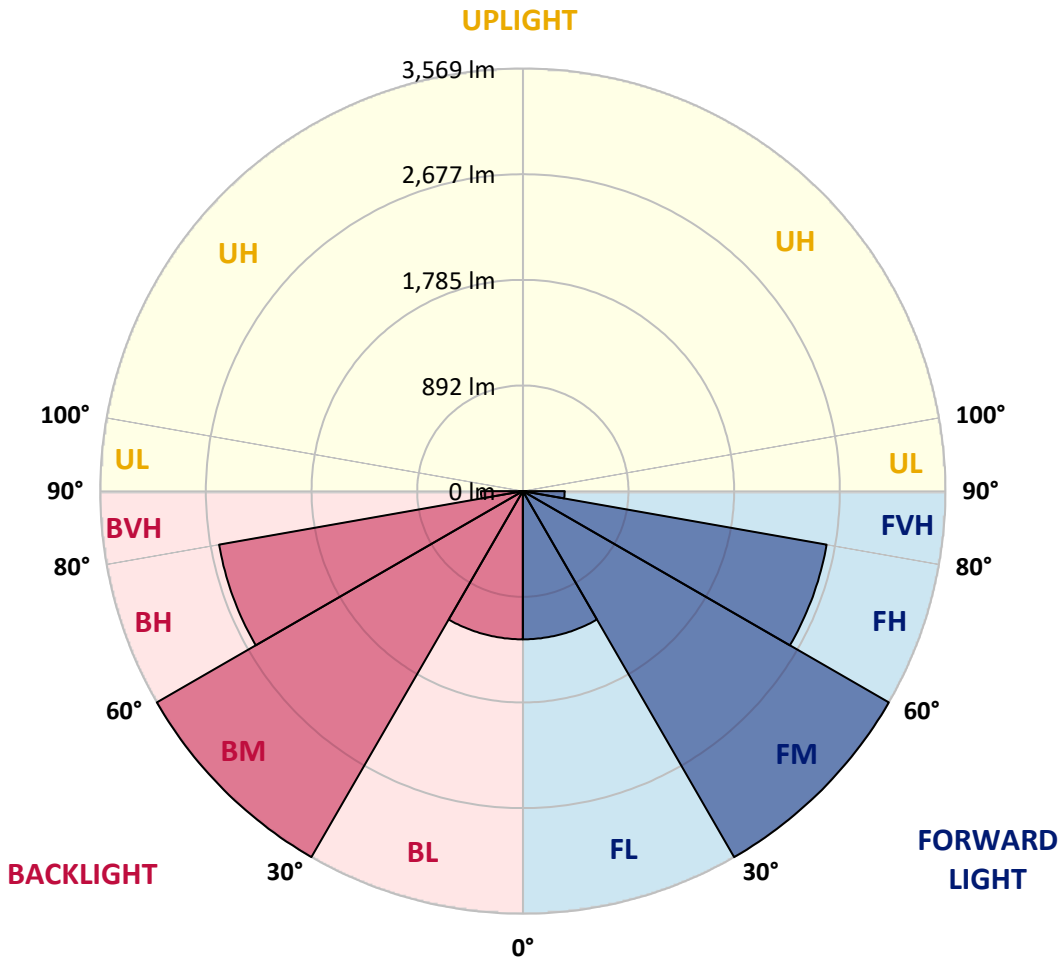
Scaled Data Report

REPORT NUMBER: P879563
CATALOG NUMBER: MEM2-HTN-VA-130-740-U-MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1251.8	8.0			
FM	(30°-60°)	3569.4	22.9			
FH	(60°-80°)	2605.3	16.7			G2/5000
FVH	(80°-90°)	353.6	2.3			G3/500
BL	(0°-30°)	1251.8	8.0	B3/2500		
BM	(30°-60°)	3569.4	22.9	B3/5000		
BH	(60°-80°)	2605.3	16.7	B4/5000		G2/5000
BVH	(80°-90°)	353.6	2.3			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3
Type V Short



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REPORT NUMBER: P879563
CATALOG NUMBER: MEM2-HTN-VA-130-740-U-MQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3147.7	3147.7	3147.7	3147.7	3147.7	3147.7	3147.7	3147.7	3147.7	3147.7	3147.7
2.5°	3142.3	3142.3	3141.5	3141.5	3140.8	3141.5	3142.3	3142.3	3141.5	3140.8	3140.0
5°	3119.9	3120.6	3120.6	3119.1	3117.5	3117.5	3117.5	3118.3	3116.8	3117.5	3116.8
7.5°	3087.3	3085.0	3087.3	3086.6	3087.3	3085.0	3088.9	3087.3	3085.0	3086.6	3086.6
10°	3050.9	3051.7	3052.5	3051.7	3054.0	3053.2	3052.5	3051.7	3050.1	3051.7	3049.4
12.5°	3016.8	3017.6	3019.9	3020.7	3023.0	3022.3	3023.0	3021.5	3020.7	3017.6	3016.8
15°	2984.3	2985.9	2989.0	2991.3	2993.6	2994.4	2992.8	2992.1	2988.2	2985.9	2984.3
17.5°	2957.2	2957.2	2961.8	2965.7	2969.6	2970.4	2969.6	2965.7	2960.3	2954.9	2955.7
20°	2938.6	2938.6	2944.0	2950.2	2955.7	2957.2	2954.9	2947.9	2939.4	2935.5	2934.7
22.5°	2930.1	2930.9	2936.3	2943.3	2951.0	2952.6	2947.9	2939.4	2930.1	2923.1	2922.3
25°	2930.9	2929.3	2934.0	2944.8	2953.3	2954.9	2951.0	2939.4	2928.5	2922.3	2920.0
27.5°	2928.5	2929.3	2934.7	2945.6	2956.4	2959.5	2953.3	2939.4	2924.7	2919.2	2917.7
30°	2927.8	2928.5	2930.1	2947.9	2960.3	2965.7	2956.4	2937.8	2925.4	2916.9	2916.2
32.5°	2924.7	2920.8	2931.6	2942.5	2958.0	2964.9	2955.7	2938.6	2918.5	2912.3	2909.2
35°	2912.3	2916.2	2925.4	2944.0	2961.8	2966.5	2955.7	2934.7	2916.9	2904.5	2903.8
37.5°	2910.0	2910.0	2924.7	2944.0	2961.8	2968.8	2959.5	2936.3	2911.5	2896.0	2896.0
40°	2906.9	2906.1	2925.4	2949.5	2972.7	2982.0	2969.6	2940.9	2910.7	2896.0	2888.3
42.5°	2915.4	2920.0	2942.5	2977.3	3006.8	3022.3	3004.4	2972.7	2937.1	2909.2	2908.4
45°	2955.7	2965.7	2989.0	3047.8	3087.3	3105.9	3085.0	3030.0	2974.2	2937.1	2934.7
47.5°	3018.4	3015.3	3070.3	3132.2	3190.3	3210.5	3180.3	3116.0	3035.4	2990.5	2978.9
50°	3061.8	3069.5	3126.1	3215.9	3302.6	3325.9	3281.7	3198.9	3111.3	3049.4	3038.5
52.5°	3120.6	3122.2	3194.2	3308.1	3397.1	3422.7	3380.1	3277.1	3159.4	3081.9	3076.5
55°	3127.6	3153.2	3240.7	3364.6	3471.5	3501.7	3449.0	3339.1	3202.0	3105.9	3096.6
57.5°	3122.2	3114.4	3220.5	3363.1	3463.8	3506.4	3454.5	3332.9	3185.7	3084.2	3059.4
60°	3010.6	3043.2	3160.1	3299.5	3428.9	3471.5	3411.1	3287.2	3126.1	3014.5	3004.4
62.5°	2934.7	2948.7	3055.6	3243.0	3349.1	3391.7	3345.2	3199.6	3027.7	2911.5	2897.6
65°	2816.2	2827.1	2952.6	3106.7	3254.6	3292.6	3232.9	3110.6	2926.2	2798.4	2772.9
67.5°	2627.2	2656.7	2780.6	2976.6	3078.8	3143.9	3090.4	2918.5	2751.2	2625.7	2607.1
70°	2407.3	2446.8	2574.6	2734.9	2905.3	2937.8	2864.3	2747.3	2559.9	2425.9	2393.3
72.5°	2195.1	2198.2	2317.4	2505.6	2613.3	2673.7	2631.9	2477.8	2294.2	2180.3	2160.2
75°	1898.4	1899.2	2030.1	2184.2	2320.5	2360.0	2293.4	2185.0	2021.6	1893.8	1881.4
77.5°	1554.5	1575.4	1691.6	1840.3	1948.0	2005.3	1958.0	1835.7	1683.1	1573.9	1561.5
80°	1219.1	1245.5	1327.6	1460.8	1553.7	1604.1	1553.0	1446.1	1329.9	1223.0	1224.6
82.5°	860.5	879.9	957.3	1048.0	1138.6	1175.8	1154.1	1075.1	969.0	875.2	849.7
85°	480.2	505.0	556.9	636.7	697.1	745.1	718.0	656.0	563.9	505.0	503.5
87.5°	141.0	152.6	173.5	226.9	284.3	305.2	299.0	283.5	248.6	223.1	206.8
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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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-176-9

Test Date: 09/25/2024

Luminaire Tested: MEM2-HTN-VA-130-740-U-RW

Data in this report applies to families of products including MEM2-HTN-VA-130-740-U-RW

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

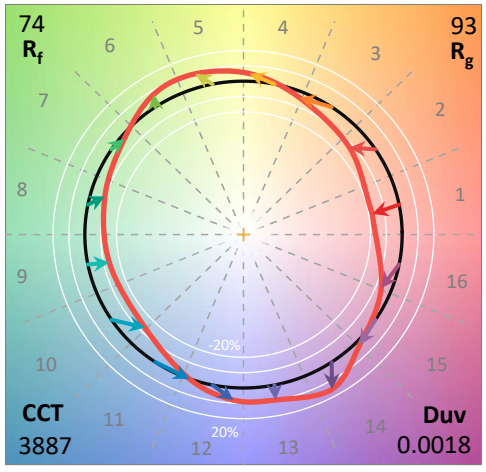
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-176-9
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-130-740-U-RW**
Description:	EPIC MODERN VISUAL COMFORT 130W WAVESTREAM RECTANGULAR WIDE

Spectral Parameters

CCT (K):	3887	CRI (Ra):	71.4		
CIE u':	0.2262	R1:	67.6	R9:	-36.8
CIE v':	0.5060	R2:	78.8	R10:	50.4
Duv:	0.0018	R3:	88.2	R11:	65.0
CIE x:	0.3870	R4:	69.8	R12:	44.4
CIE y:	0.3847	R5:	67.7	R13:	69.4
CIE z:	0.2283	R6:	70.3	R14:	93.3
Peak Wavelength (nm):	583	R7:	80.1	R15:	59.9
Dominant Wavelength (nm):	578	R8:	49.0		
Purity:	31.59626				

Rf:	74.5
Rg:	93.5



Test Conditions

Stabilization Time:	50M
Operation Time:	1H 50M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-176-9

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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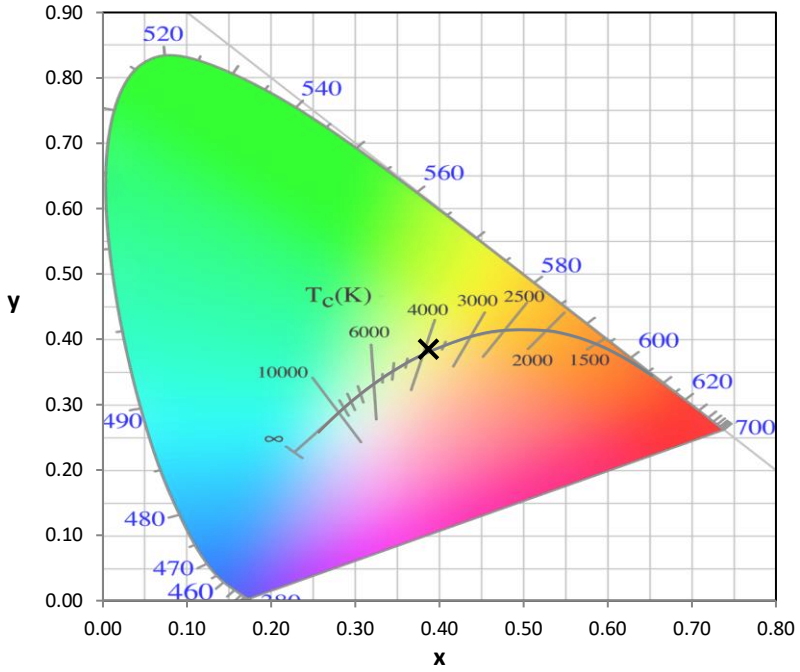
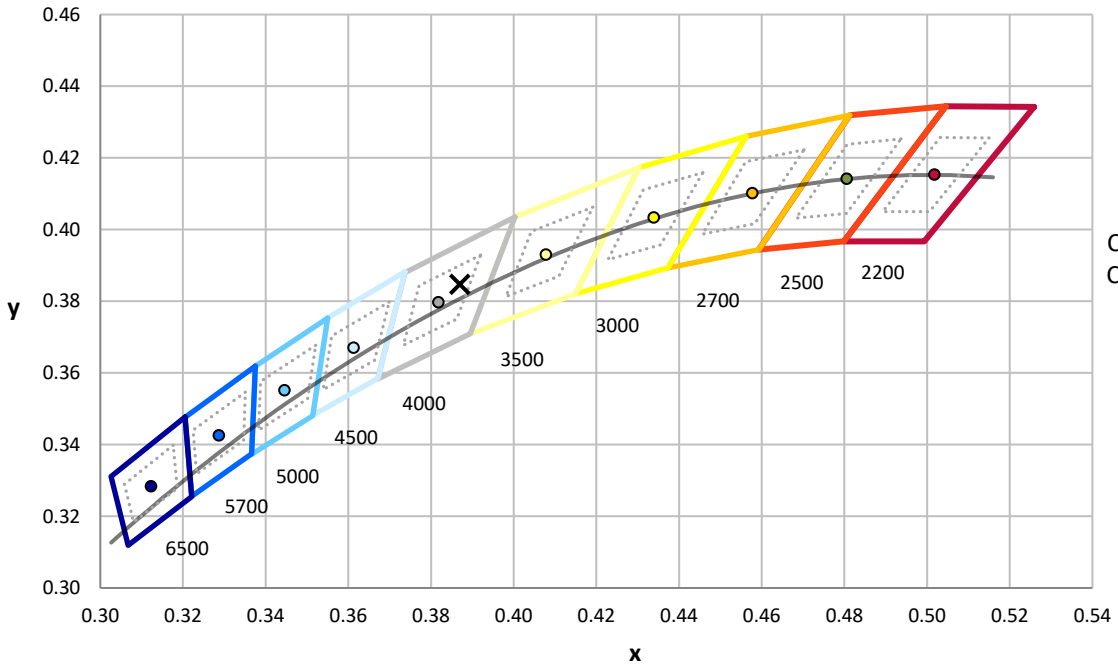
CIE 1931 Chromaticity Diagram



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



CCT = 3887K
CIE x = 0.3870
CIE y = 0.3847
Duv = 0.0018

Point lies inside the ANSI 4000K 4-step quadrangle

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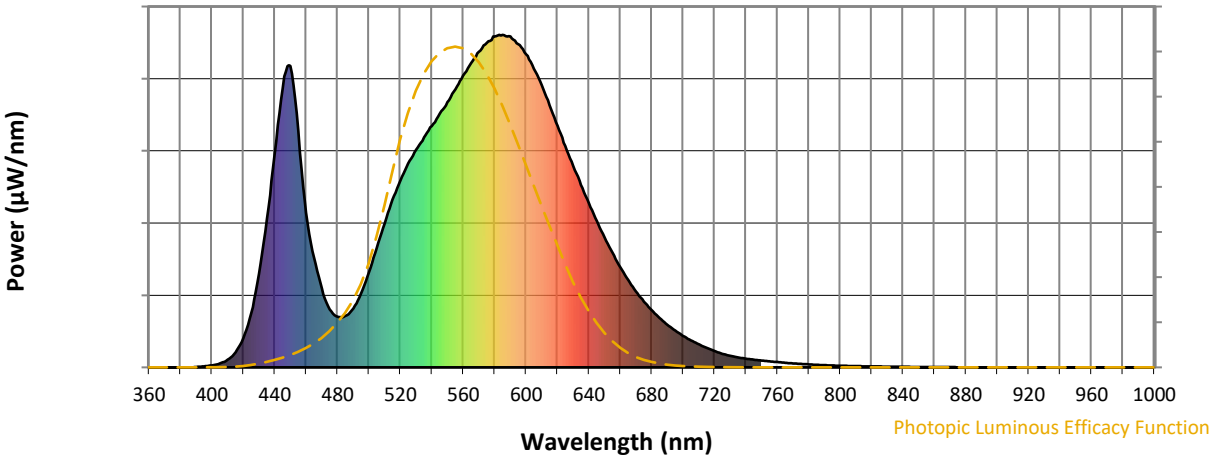
Photopic Flux vs. Wavelength

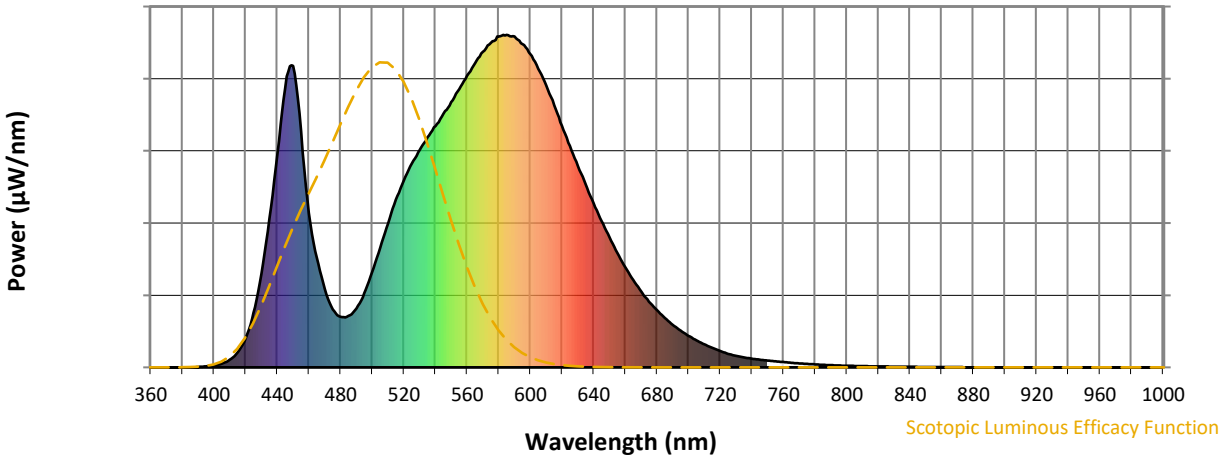


Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	177	NR	620	727	NR	750	21	NR	880	0	NR
365	0	NR	495	222	NR	625	666	NR	755	18	NR	885	0	NR
370	0	NR	500	286	NR	630	606	NR	760	16	NR	890	0	NR
375	0	NR	505	359	NR	635	549	NR	765	14	NR	895	0	NR
380	0	NR	510	433	NR	640	493	NR	770	12	NR	900	0	NR
385	0	NR	515	505	NR	645	440	NR	775	10	NR	905	0	NR
390	1	NR	520	562	NR	650	390	NR	780	9	NR	910	0	NR
395	3	NR	525	613	NR	655	344	NR	785	8	NR	915	0	NR
400	6	NR	530	654	NR	660	301	NR	790	7	NR	920	0	NR
405	11	NR	535	692	NR	665	263	NR	795	6	NR	925	0	NR
410	23	NR	540	726	NR	670	228	NR	800	5	NR	930	0	NR
415	45	NR	545	763	NR	675	198	NR	805	4	NR	935	0	NR
420	88	NR	550	798	NR	680	172	NR	810	4	NR	940	0	NR
425	164	NR	555	837	NR	685	148	NR	815	3	NR	945	0	NR
430	281	NR	560	878	NR	690	128	NR	820	3	NR	950	0	NR
435	447	NR	565	915	NR	695	110	NR	825	2	NR	955	0	NR
440	642	NR	570	948	NR	700	95	NR	830	2	NR	960	0	NR
445	838	NR	575	976	NR	705	81	NR	835	2	NR	965	0	NR
450	907	NR	580	995	NR	710	69	NR	840	2	NR	970	0	NR
455	710	NR	585	1000	NR	715	58	NR	845	1	NR	975	0	NR
460	465	NR	590	995	NR	720	49	NR	850	1	NR	980	0	NR
465	330	NR	595	972	NR	725	41	NR	855	1	NR	985	0	NR
470	236	NR	600	941	NR	730	35	NR	860	1	NR	990	0	NR
475	174	NR	605	898	NR	735	30	NR	865	1	NR	995	0	NR
480	152	NR	610	848	NR	740	26	NR	870	1	NR	1000	0	NR
485	155	NR	615	788	NR	745	23	NR	875	0	NR			

REPORT NUMBER: SP1-2407-176-9

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.49**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	177	NR	620	727	NR	750	21	NR	880	0	NR
365	0	NR	495	222	NR	625	666	NR	755	18	NR	885	0	NR
370	0	NR	500	286	NR	630	606	NR	760	16	NR	890	0	NR
375	0	NR	505	359	NR	635	549	NR	765	14	NR	895	0	NR
380	0	NR	510	433	NR	640	493	NR	770	12	NR	900	0	NR
385	0	NR	515	505	NR	645	440	NR	775	10	NR	905	0	NR
390	1	NR	520	562	NR	650	390	NR	780	9	NR	910	0	NR
395	3	NR	525	613	NR	655	344	NR	785	8	NR	915	0	NR
400	6	NR	530	654	NR	660	301	NR	790	7	NR	920	0	NR
405	11	NR	535	692	NR	665	263	NR	795	6	NR	925	0	NR
410	23	NR	540	726	NR	670	228	NR	800	5	NR	930	0	NR
415	45	NR	545	763	NR	675	198	NR	805	4	NR	935	0	NR
420	88	NR	550	798	NR	680	172	NR	810	4	NR	940	0	NR
425	164	NR	555	837	NR	685	148	NR	815	3	NR	945	0	NR
430	281	NR	560	878	NR	690	128	NR	820	3	NR	950	0	NR
435	447	NR	565	915	NR	695	110	NR	825	2	NR	955	0	NR
440	642	NR	570	948	NR	700	95	NR	830	2	NR	960	0	NR
445	838	NR	575	976	NR	705	81	NR	835	2	NR	965	0	NR
450	907	NR	580	995	NR	710	69	NR	840	2	NR	970	0	NR
455	710	NR	585	1000	NR	715	58	NR	845	1	NR	975	0	NR
460	465	NR	590	995	NR	720	49	NR	850	1	NR	980	0	NR
465	330	NR	595	972	NR	725	41	NR	855	1	NR	985	0	NR
470	236	NR	600	941	NR	730	35	NR	860	1	NR	990	0	NR
475	174	NR	605	898	NR	735	30	NR	865	1	NR	995	0	NR
480	152	NR	610	848	NR	740	26	NR	870	1	NR	1000	0	NR
485	155	NR	615	788	NR	745	23	NR	875	0	NR			

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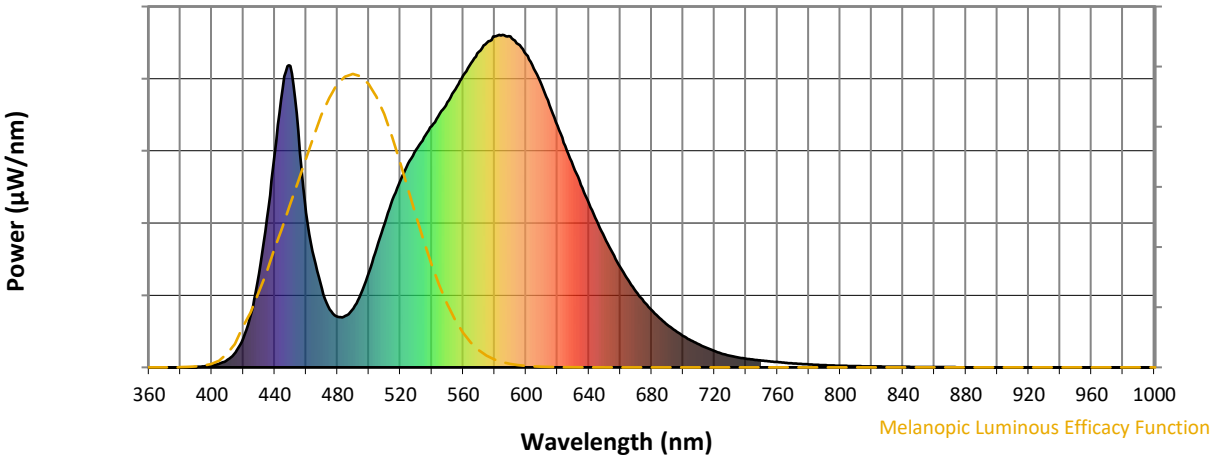
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.89**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	177	NR	620	727	NR	750	21	NR	880	0	NR
365	0	NR	495	222	NR	625	666	NR	755	18	NR	885	0	NR
370	0	NR	500	286	NR	630	606	NR	760	16	NR	890	0	NR
375	0	NR	505	359	NR	635	549	NR	765	14	NR	895	0	NR
380	0	NR	510	433	NR	640	493	NR	770	12	NR	900	0	NR
385	0	NR	515	505	NR	645	440	NR	775	10	NR	905	0	NR
390	1	NR	520	562	NR	650	390	NR	780	9	NR	910	0	NR
395	3	NR	525	613	NR	655	344	NR	785	8	NR	915	0	NR
400	6	NR	530	654	NR	660	301	NR	790	7	NR	920	0	NR
405	11	NR	535	692	NR	665	263	NR	795	6	NR	925	0	NR
410	23	NR	540	726	NR	670	228	NR	800	5	NR	930	0	NR
415	45	NR	545	763	NR	675	198	NR	805	4	NR	935	0	NR
420	88	NR	550	798	NR	680	172	NR	810	4	NR	940	0	NR
425	164	NR	555	837	NR	685	148	NR	815	3	NR	945	0	NR
430	281	NR	560	878	NR	690	128	NR	820	3	NR	950	0	NR
435	447	NR	565	915	NR	695	110	NR	825	2	NR	955	0	NR
440	642	NR	570	948	NR	700	95	NR	830	2	NR	960	0	NR
445	838	NR	575	976	NR	705	81	NR	835	2	NR	965	0	NR
450	907	NR	580	995	NR	710	69	NR	840	2	NR	970	0	NR
455	710	NR	585	1000	NR	715	58	NR	845	1	NR	975	0	NR
460	465	NR	590	995	NR	720	49	NR	850	1	NR	980	0	NR
465	330	NR	595	972	NR	725	41	NR	855	1	NR	985	0	NR
470	236	NR	600	941	NR	730	35	NR	860	1	NR	990	0	NR
475	174	NR	605	898	NR	735	30	NR	865	1	NR	995	0	NR
480	152	NR	610	848	NR	740	26	NR	870	1	NR	1000	0	NR
485	155	NR	615	788	NR	745	23	NR	875	0	NR			

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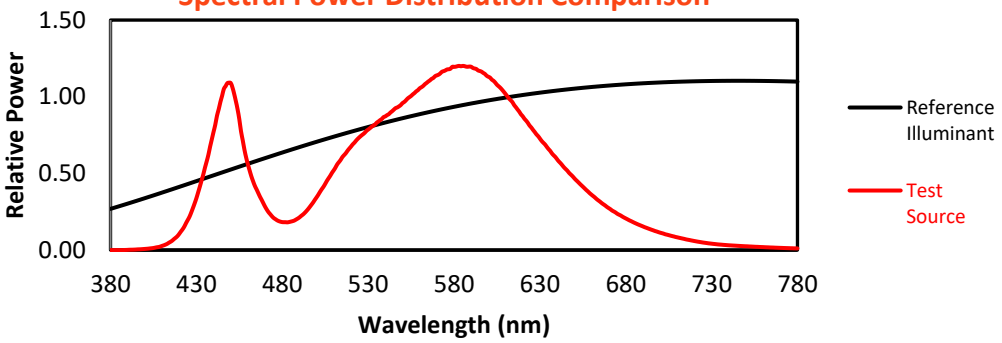
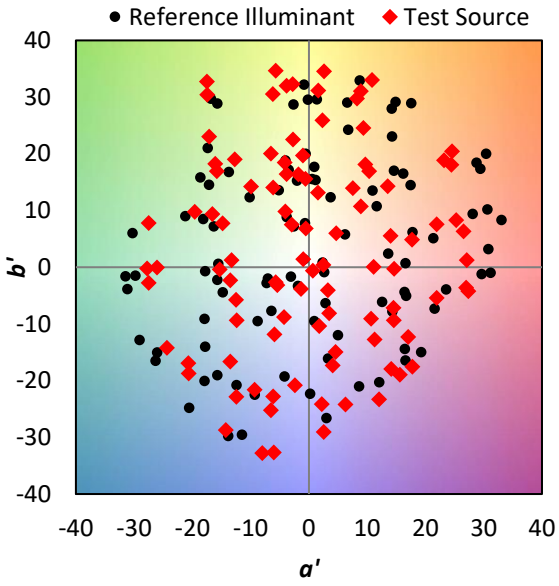
Summary

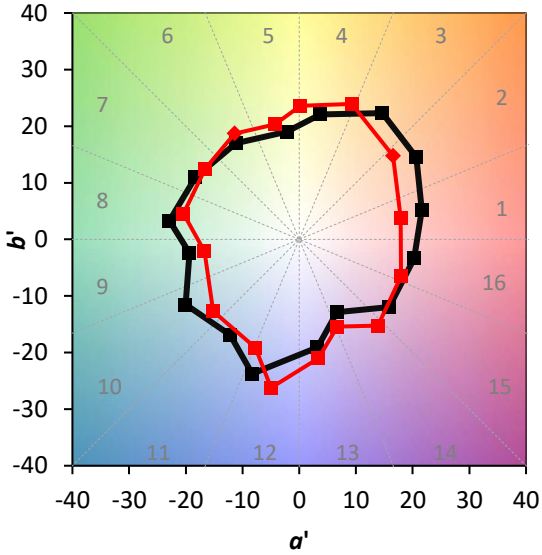
R_f = 74.5
R_g = 93.5
CIE R_a = 71.4
R_9 = -36.8

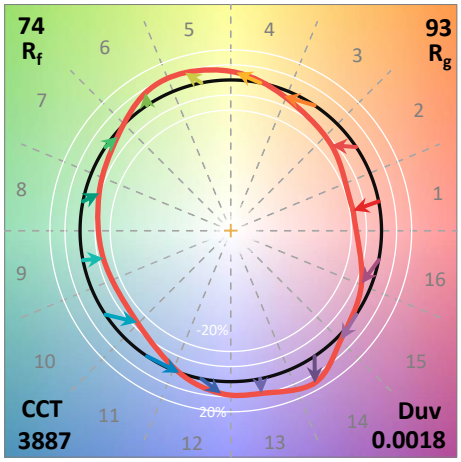
Spectral Power Distribution Comparison

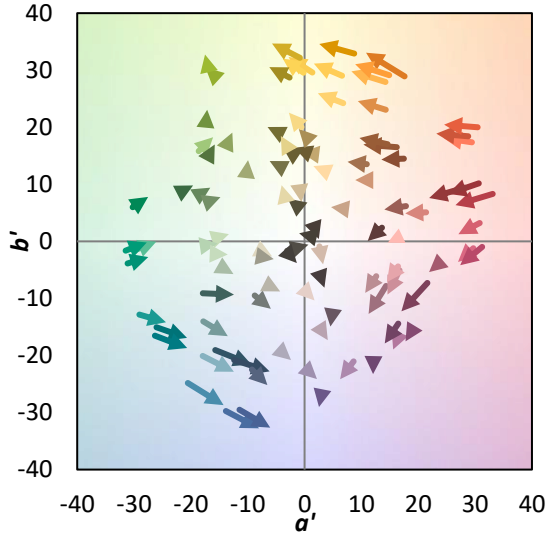


Color Vector Graphics









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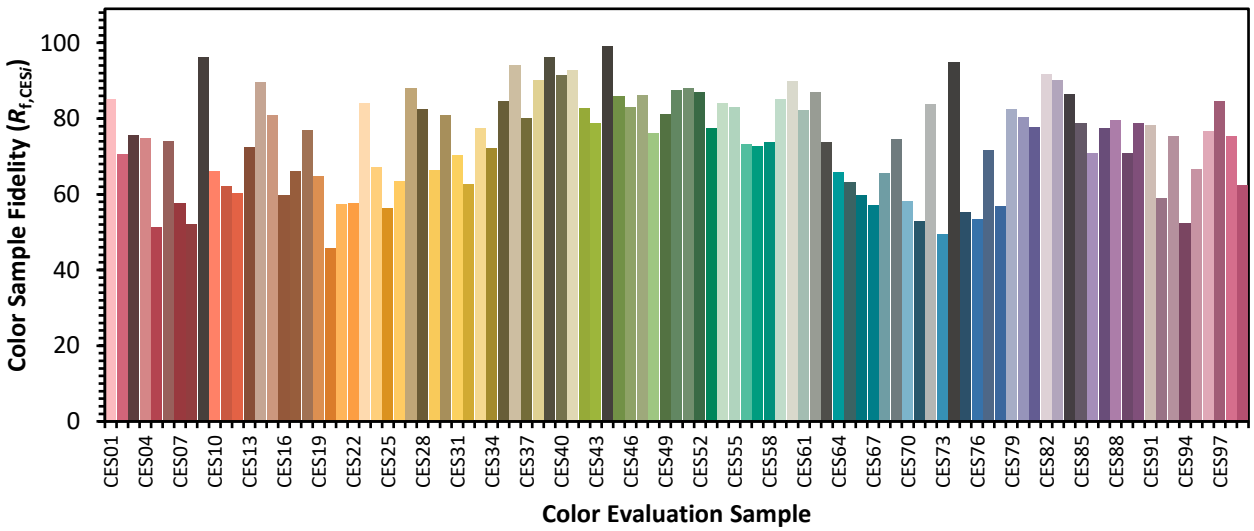
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 63	CES51 = 88	CES76 = 54
CES02 = 61	CES27 = 88	CES52 = 87	CES77 = 72
CES03 = 30	CES28 = 82	CES53 = 77	CES78 = 57
CES04 = 70	CES29 = 66	CES54 = 84	CES79 = 83
CES05 = 47	CES30 = 81	CES55 = 83	CES80 = 80
CES06 = 50	CES31 = 70	CES56 = 73	CES81 = 78
CES07 = 40	CES32 = 63	CES57 = 73	CES82 = 92
CES08 = 39	CES33 = 77	CES58 = 74	CES83 = 90
CES09 = 29	CES34 = 72	CES59 = 85	CES84 = 87
CES10 = 74	CES35 = 85	CES60 = 90	CES85 = 79
CES11 = 57	CES36 = 94	CES61 = 82	CES86 = 71
CES12 = 63	CES37 = 80	CES62 = 87	CES87 = 77
CES13 = 42	CES38 = 90	CES63 = 74	CES88 = 80
CES14 = 74	CES39 = 96	CES64 = 66	CES89 = 71
CES15 = 71	CES40 = 92	CES65 = 63	CES90 = 79
CES16 = 46	CES41 = 93	CES66 = 60	CES91 = 78
CES17 = 49	CES42 = 83	CES67 = 57	CES92 = 59
CES18 = 56	CES43 = 79	CES68 = 65	CES93 = 75
CES19 = 72	CES44 = 99	CES69 = 74	CES94 = 52
CES20 = 65	CES45 = 86	CES70 = 58	CES95 = 67
CES21 = 86	CES46 = 83	CES71 = 53	CES96 = 77
CES22 = 78	CES47 = 86	CES72 = 84	CES97 = 85
CES23 = 92	CES48 = 76	CES73 = 49	CES98 = 75
CES24 = 91	CES49 = 81	CES74 = 95	CES99 = 62
CES25 = 72	CES50 = 88	CES75 = 55	



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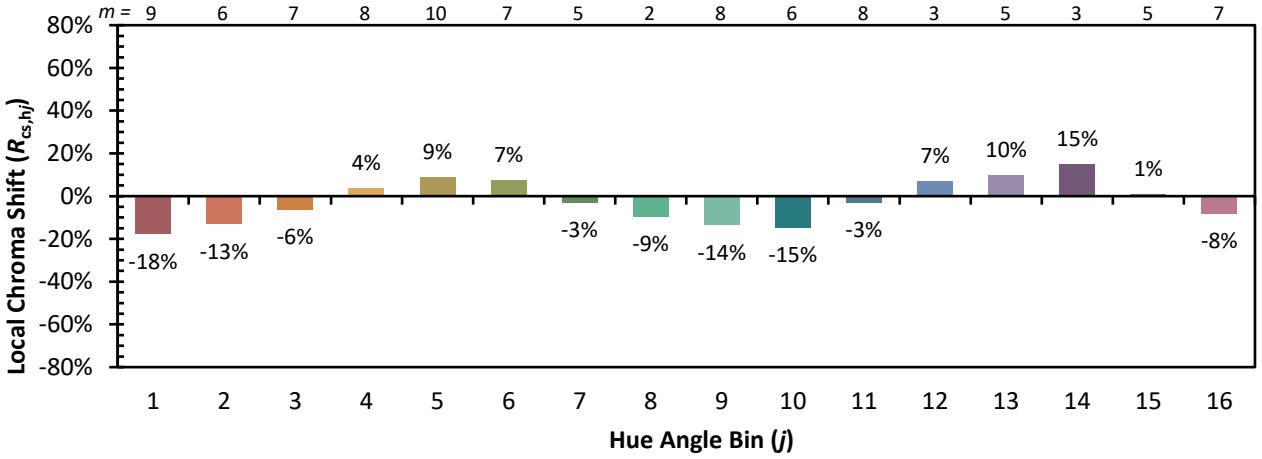
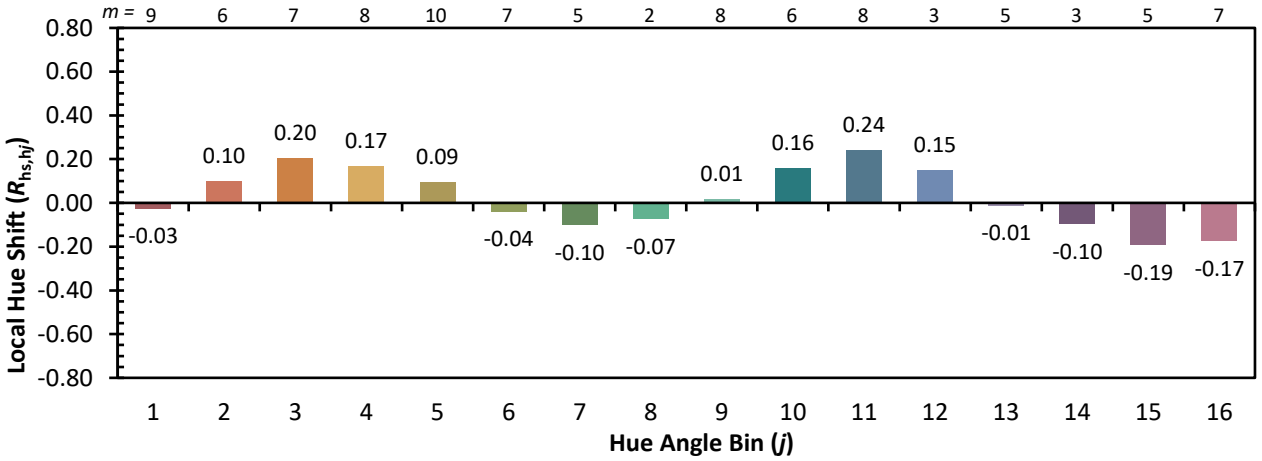
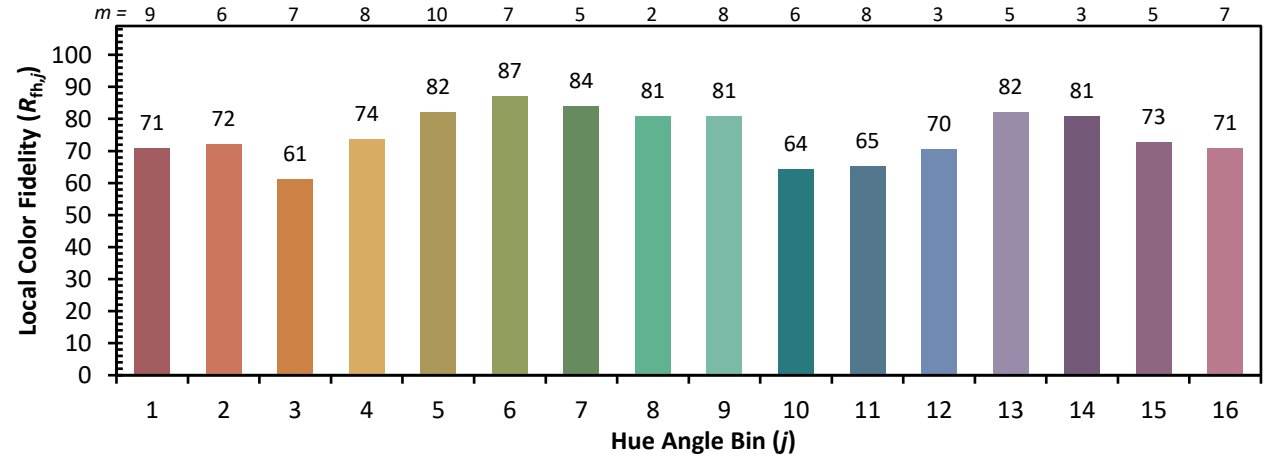
Color Rendition by Hue-Angle Bin







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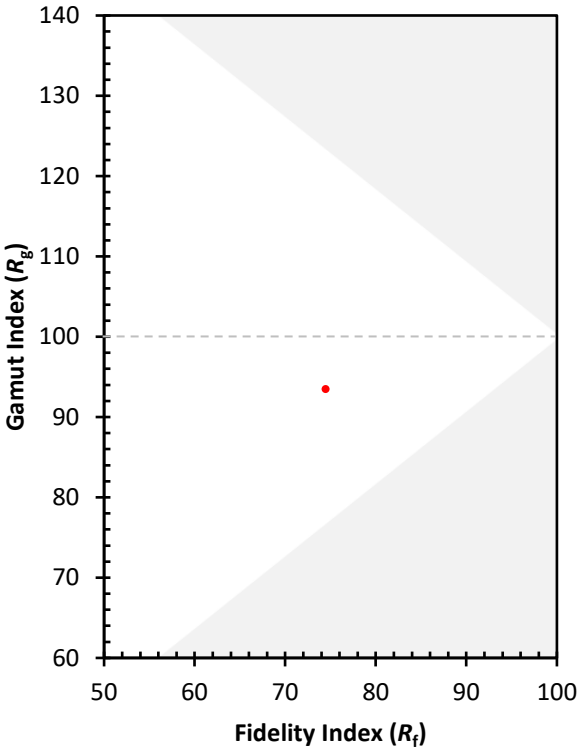
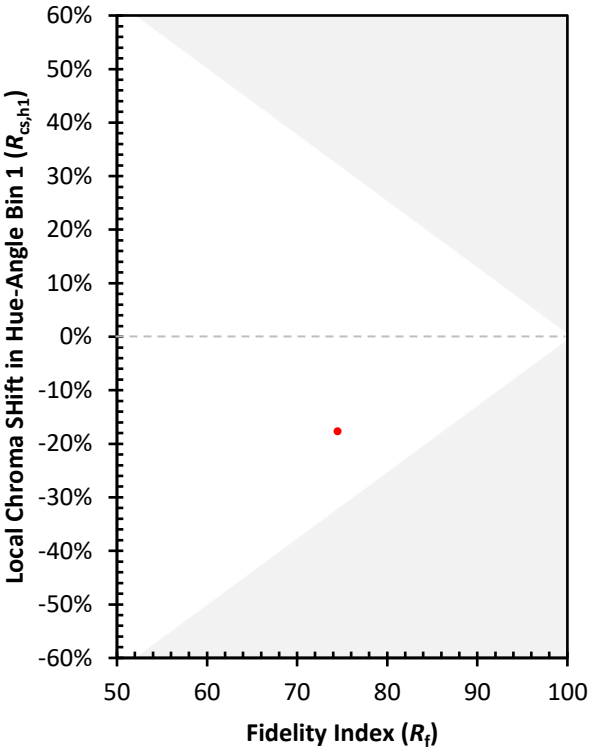
Measure Comparisons





(END OF REPORT)