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: P870318

Luminaire Tested: **MEM2-HSN-SA-110-840-U-T2U**

Issue Date: 09/05/2024

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:	P870318
Test Lab:	INNOVATION CENTER(G3)
Issue Date:	09/05/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	STREETWORKS
Catalog Number:	MEM2-HSN-SA-110-840-U-T2U
Description:	EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 110W 80CRI 4000K FIXTURE w/ TYPE II URBAN DISTRIBUTION OPTIC
Light Source:	(30) 4000K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	16152.8 lumens
Efficiency:	N/A
Efficacy:	142.9 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.33' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B3 - U0 - G3

Input Watts (W):	113
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.99
Total Harmonic Distortion (THDi):	7.77%
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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REPORT NUMBER: P870318
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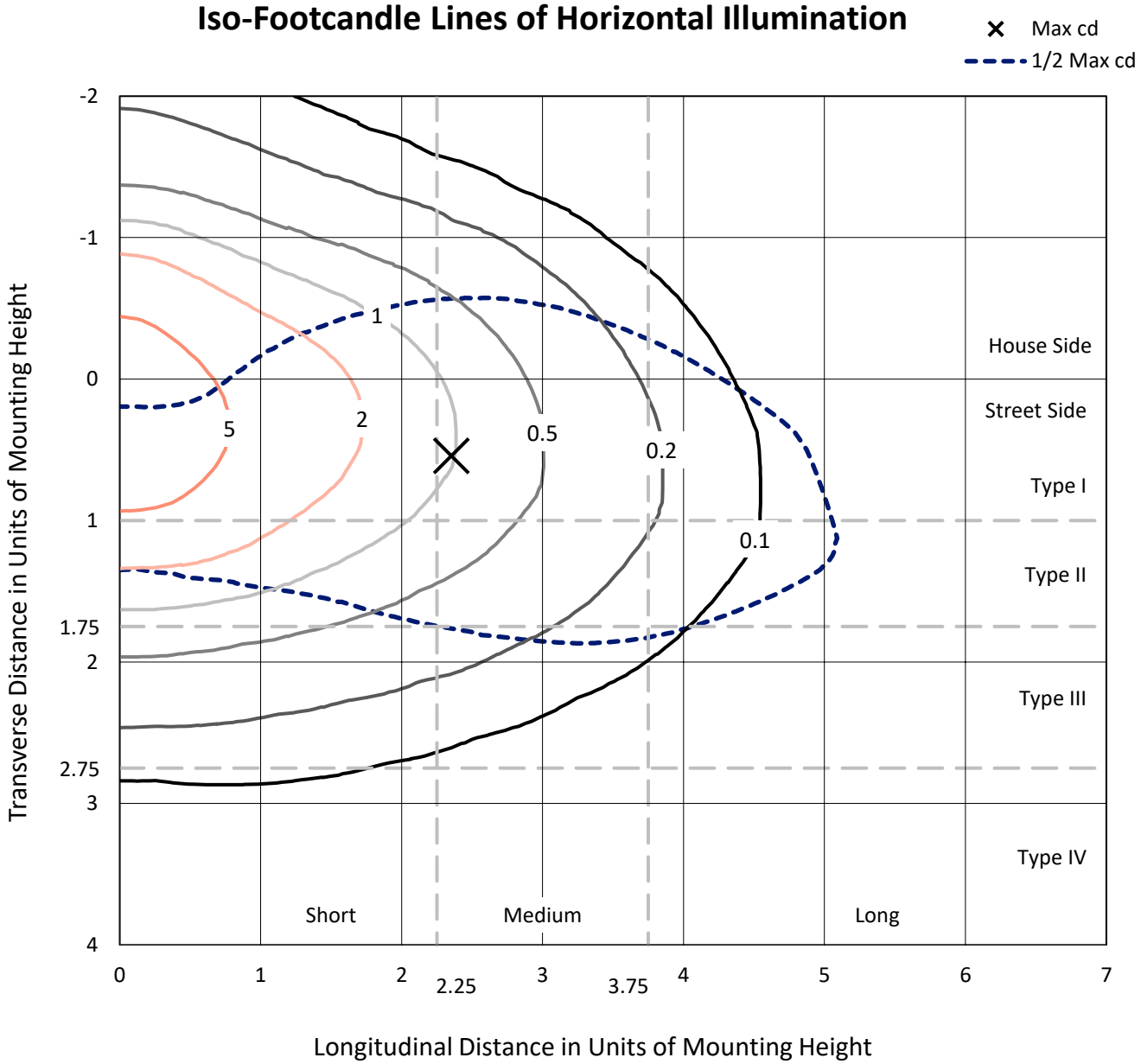
Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 8.7 fc
Type III - Medium - N/A

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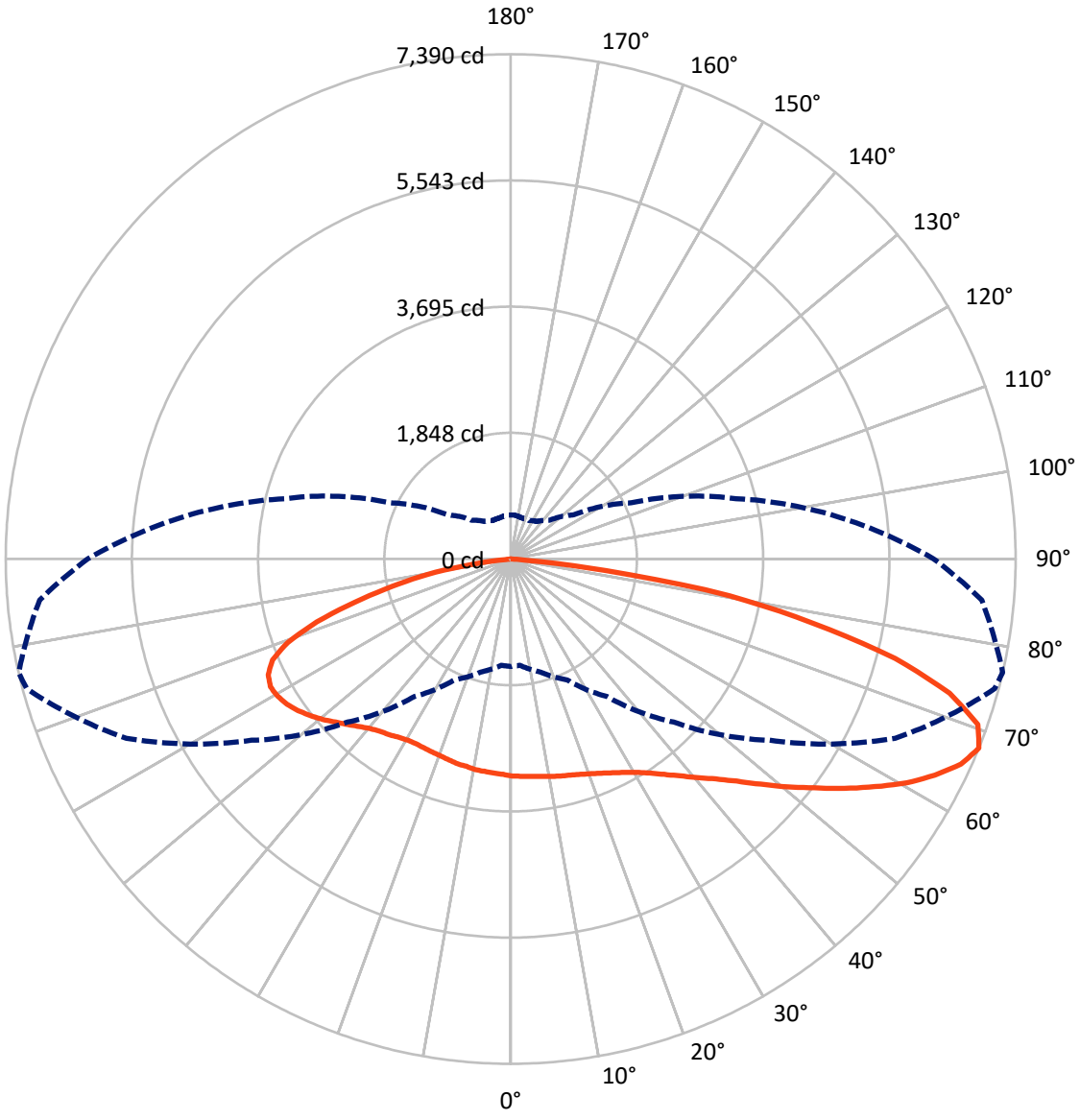
Luminous Intensity Polar Plot



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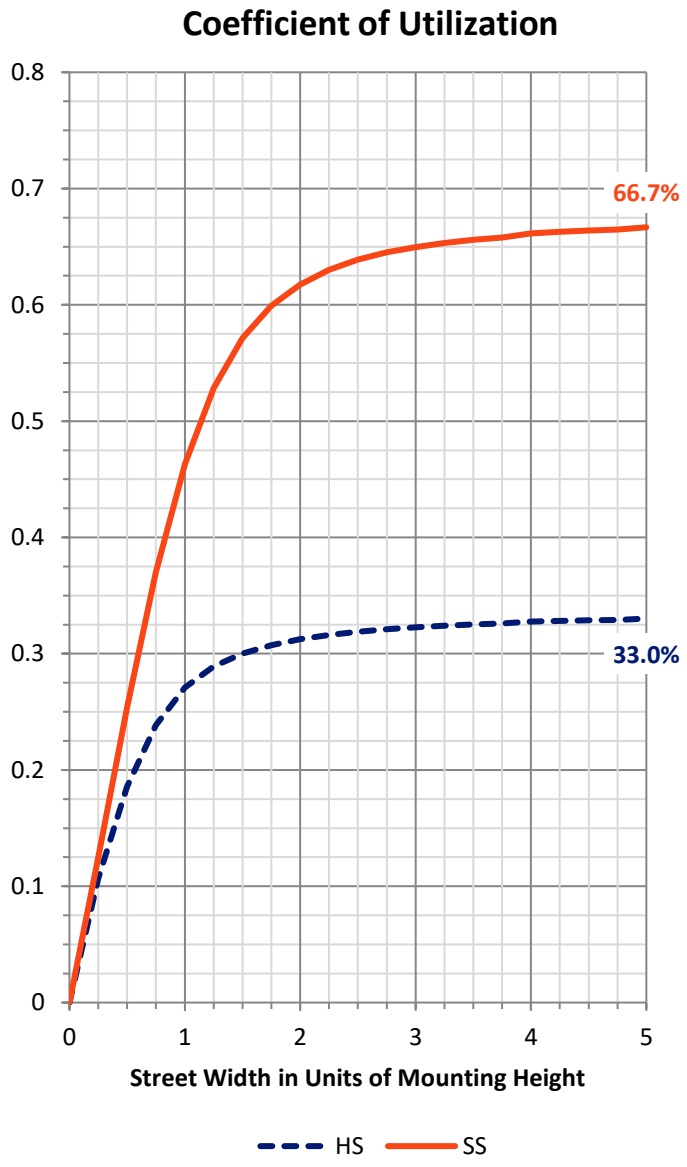
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5371.4	0.0	5371.4
	% Fixture	33.3	0.0	33.3
Street Side	Lumens	10781.5	0.0	10781.5
	% Fixture	66.7	0.0	66.7
Total	Lumens	16152.8	0.0	16152.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.2	1.9
10°-20°	925.7	5.7
20°-30°	1560.7	9.7
30°-40°	2214.7	13.7
40°-50°	2802.1	17.3
50°-60°	3069.6	19.0
60°-70°	2967.2	18.4
70°-80°	1995.7	12.4
80°-90°	311.9	1.9
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°	16152.8	100.0
0°-180°	16152.8	100.0



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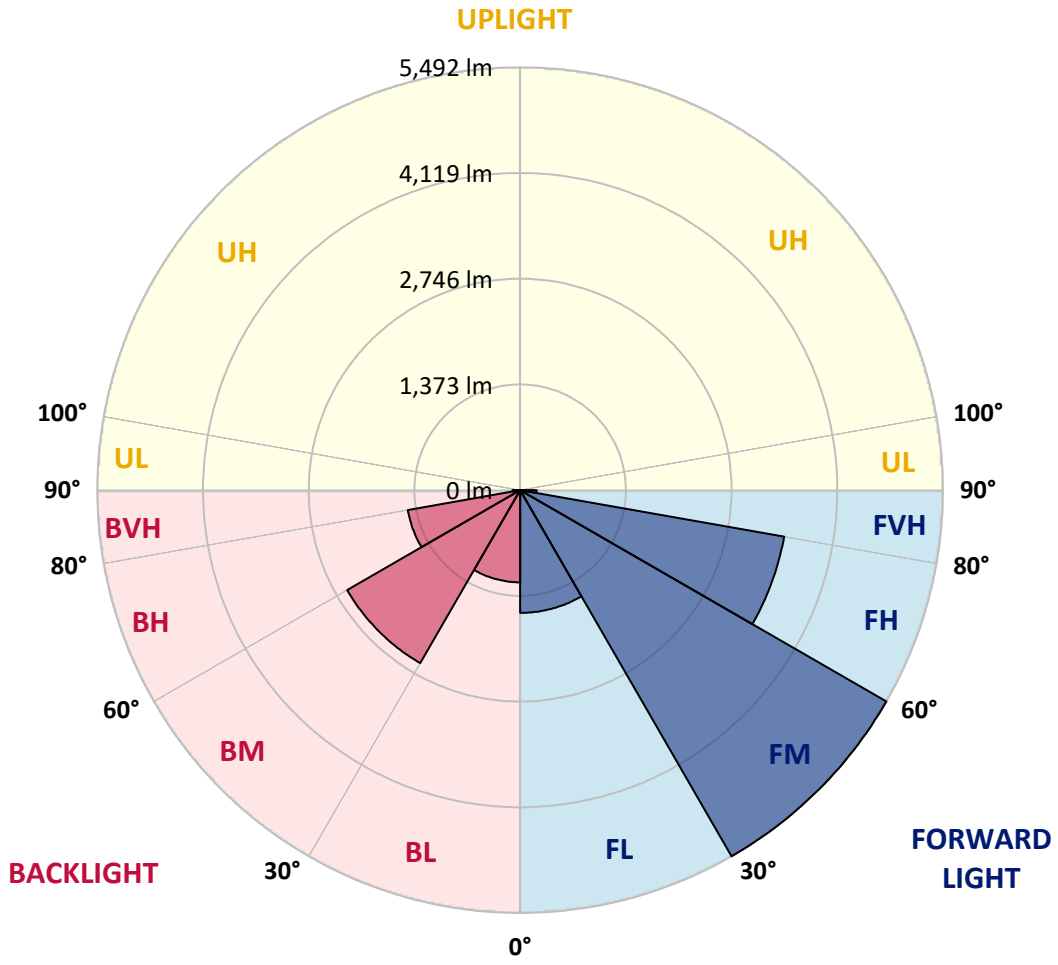
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1594.3	9.9			
FM	(30°-60°)	5492.2	34.0			
FH	(60°-80°)	3481.4	21.6			G2/5000
FVH	(80°-90°)	213.6	1.3			G2/225
BL	(0°-30°)	1197.4	7.4	B3/2500		
BM	(30°-60°)	2594.2	16.1	B3/5000		
BH	(60°-80°)	1481.4	9.2	B3/2500		G3/2500
BVH	(80°-90°)	98.3	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	*3175.8*	3175.8
2.5°	3246.1	3242.9	3226.9	3233.3	3214.2	3226.9	3207.8	3191.8	3188.6	*3185.4*	3188.6
5°	3348.3	3332.4	3316.4	3306.8	3290.8	3284.4	3252.5	3220.5	3201.4	*3198.2*	3191.8
7.5°	3466.6	3460.2	3437.8	3425.0	3380.3	3357.9	3313.2	3255.7	3226.9	*3214.2*	3198.2
10°	3588.0	3603.9	3575.2	3549.6	3498.5	3450.6	3373.9	3300.4	3242.9	*3236.5*	3201.4
12.5°	3738.1	3734.9	3715.8	3671.0	3610.3	3543.2	3450.6	3348.3	3271.7	*3258.9*	3207.8
15°	3872.3	3869.1	3843.6	3802.0	3722.2	3639.1	3514.5	3396.3	3300.4	*3281.3*	3220.5
17.5°	3996.9	3990.5	3974.6	3929.8	3830.8	3728.6	3607.1	3450.6	3335.6	*3313.2*	3230.1
20°	4105.6	4112.0	4092.8	4048.1	3955.4	3846.8	3693.4	3520.9	3380.3	*3354.7*	3258.9
22.5°	4223.8	4227.0	4217.4	4201.4	4083.2	3968.2	3802.0	3600.8	3431.4	*3405.9*	3290.8
25°	4348.4	4351.6	4358.0	4348.4	4214.2	4089.6	3913.9	3699.8	3501.7	*3466.6*	3335.6
27.5°	4492.2	4495.4	4508.1	4489.0	4345.2	4214.2	4038.5	3805.2	3575.2	*3536.9*	3373.9
30°	4655.1	4667.9	4658.3	4651.9	4485.8	4358.0	4163.1	3913.9	3671.0	*3623.1*	3441.0
32.5°	4850.0	4846.8	4827.6	4808.5	4639.1	4504.9	4303.7	4054.4	3789.3	*3734.9*	3549.6
35°	4990.6	4990.6	4961.8	4952.2	4795.7	4655.1	4457.0	4211.0	3923.4	*3872.3*	3664.7
37.5°	5076.8	5089.6	5067.3	5073.6	4923.5	4792.5	4610.4	4370.7	4070.4	*4025.7*	3805.2
40°	5108.8	5140.7	5159.9	5185.5	5035.3	4923.5	4773.3	4543.3	4258.9	*4207.8*	3974.6
42.5°	5115.2	5163.1	5230.2	5284.5	5115.2	5022.5	4929.9	4719.0	4444.2	*4399.5*	4159.9
45°	5083.2	5060.9	5223.8	5230.2	5159.9	5102.4	5067.3	4929.9	4712.6	*4639.1*	4389.9
47.5°	4840.4	4814.8	4859.6	5064.1	5105.6	5137.5	5207.8	5175.9	4981.0	*4923.5*	4655.1
50°	4447.4	4434.6	4613.6	4834.0	4971.4	5134.3	5322.9	5412.3	5278.1	*5243.0*	4990.6
52.5°	3798.8	3763.7	4127.9	4556.1	4795.7	5102.4	5402.7	5655.1	5613.6	*5562.5*	5278.1
55°	3386.7	3386.7	3632.7	4166.3	4572.0	4987.4	5453.8	5910.7	5984.2	*5926.7*	5607.2
57.5°	2945.8	2980.9	3236.5	3603.9	4249.3	4776.5	5447.5	6124.8	6342.1	*6287.7*	5955.5
60°	2568.8	2597.5	2744.5	3115.1	3869.1	4498.5	5377.2	6300.5	6674.3	*6655.2*	6262.2
62.5°	2185.4	2220.5	2338.7	2687.0	3367.5	4179.0	5230.2	6396.4	6987.4	*6968.3*	6572.1
65°	1878.7	1881.8	2000.1	2290.8	2865.9	3792.5	4971.4	6377.2	7230.3	*7243.0*	6834.1
67.5°	*1571.9*	*1562.3*	*1715.7*	*1952.1*	*2456.9*	*3377.1*	*4626.3*	*6207.9*	*7332.5*	*7390.0*	*6920.3*
70°	1156.6	1169.4	1383.4	1645.4	2076.7	2897.9	4143.9	5878.8	7166.4	*7255.8*	6722.3
72.5°	869.0	894.6	1102.3	1373.8	1734.9	2418.6	3616.7	5306.9	6703.1	*6715.9*	6118.4
75°	706.1	712.5	897.8	1140.6	1421.8	1939.4	2904.2	4431.5	5667.9	*5814.9*	5198.2
77.5°	600.7	594.3	683.7	920.2	1147.0	1549.6	2188.6	3370.7	4450.6	*4517.7*	4070.4
80°	511.2	508.0	540.0	744.4	897.8	1105.5	1498.5	2348.3	3175.8	*3249.3*	2891.5
82.5°	268.4	287.5	281.2	460.1	508.0	581.5	718.9	1067.1	1386.6	*1405.8*	1329.1
85°	12.8	12.8	12.8	19.2	31.9	51.1	99.0	99.0	108.6	*207.7*	236.4
87.5°	3.2	3.2	6.4	6.4	6.4	9.6	9.6	12.8	12.8	*12.8*	12.8
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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Scaled Data Report

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CATALOG NUMBER: MEM2-HSN-SA-110-840-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8	3175.8
2.5°	3182.2	3169.4	3150.3	3153.5	3150.3	3150.3	3134.3	3121.5	3118.3	3124.7	3137.5
5°	3185.4	3166.2	3137.5	3127.9	3118.3	3111.9	3086.4	3067.2	3057.6	3064.0	3067.2
7.5°	3185.4	3156.6	3124.7	3105.5	3080.0	3060.8	3032.0	3006.5	2993.7	2996.9	3003.3
10°	3179.0	3147.1	3121.5	3083.2	3041.6	3019.3	2974.5	2942.6	2926.6	2929.8	2913.8
12.5°	3179.0	3143.9	3092.7	3057.6	3000.1	2952.2	2917.0	2881.9	2869.1	2856.3	2849.9
15°	3182.2	3137.5	3086.4	3012.9	2945.8	2894.7	2849.9	2827.6	2808.4	2802.0	2805.2
17.5°	3182.2	3137.5	3060.8	2974.5	2897.9	2834.0	2795.6	2770.1	2763.7	2757.3	2757.3
20°	3198.2	3140.7	3038.4	2936.2	2840.3	2773.3	2738.1	2722.1	2722.1	2712.5	2712.5
22.5°	3223.7	3147.1	3025.7	2904.2	2792.4	2718.9	2680.6	2661.4	2671.0	2664.6	2661.4
25°	3252.5	3169.4	3009.7	2859.5	2728.5	2651.8	2613.5	2600.7	2597.5	2581.6	2603.9
27.5°	3274.9	3185.4	3000.1	2814.8	2671.0	2581.6	2533.6	2511.3	2495.3	2501.7	2495.3
30°	3335.6	3230.1	3003.3	2776.4	2607.1	2498.5	2441.0	2415.4	2409.0	2409.0	2409.0
32.5°	3418.6	3287.6	3025.7	2760.5	2546.4	2418.6	2348.3	2322.8	2316.4	2303.6	2310.0
35°	3524.1	3373.9	3060.8	2734.9	2498.5	2326.0	2249.3	2214.1	2204.5	2191.8	2191.8
37.5°	3642.3	3460.2	3086.4	2722.1	2434.6	2230.1	2143.8	2099.1	2092.7	2079.9	2086.3
40°	3792.5	3578.4	3127.9	2696.6	2361.1	2143.8	2028.8	1955.3	1971.3	1977.7	1990.5
42.5°	3961.8	3728.6	3191.8	2671.0	2303.6	2054.4	1885.0	1811.6	1830.7	1824.3	1837.1
45°	4191.8	3904.3	3271.7	2661.4	2233.3	1945.7	1738.1	1655.0	1648.6	1639.0	1645.4
47.5°	4431.5	4115.1	3348.3	2642.3	2156.6	1811.6	1571.9	1466.5	1440.9	1428.2	1415.4
50°	4680.7	4326.0	3437.8	2629.5	2054.4	1661.4	1405.8	1284.4	1236.5	1220.5	1204.5
52.5°	4961.8	4552.9	3514.5	2597.5	1942.6	1504.8	1255.6	1118.2	1063.9	1032.0	1035.2
55°	5259.0	4760.5	3584.8	2559.2	1814.8	1357.9	1105.5	990.4	936.1	926.5	926.5
57.5°	5533.7	4974.6	3635.9	2492.1	1687.0	1214.1	980.9	881.8	856.3	869.0	869.0
60°	5814.9	5147.1	3661.5	2418.6	1556.0	1092.7	894.6	814.7	801.9	827.5	830.7
62.5°	6041.7	5284.5	3655.1	2316.4	1412.2	987.3	811.5	747.6	754.0	798.7	808.3
65°	6204.7	5351.6	3575.2	2163.0	1274.8	894.6	738.0	677.3	677.3	709.3	718.9
67.5°	*6191.9*	*5265.3*	*3415.4*	*1948.9*	*1127.8*	*801.9*	*670.9*	*623.0*	*623.0*	*645.4*	*642.2*
70°	5929.9	4968.2	3111.9	1690.1	984.1	722.1	613.4	578.3	575.1	584.7	581.5
72.5°	5300.5	4364.4	2639.1	1396.2	849.9	642.2	555.9	524.0	517.6	504.8	495.2
75°	4373.9	3584.8	2060.8	1111.9	718.9	565.5	501.6	472.9	447.3	463.3	453.7
77.5°	3393.1	2750.9	1533.6	862.6	584.7	492.0	447.3	415.3	409.0	466.5	447.3
80°	2476.1	1901.0	1083.1	616.6	453.7	399.4	373.8	348.3	440.9	591.1	587.9
82.5°	1099.1	917.0	495.2	293.9	210.9	175.7	147.0	166.1	278.0	271.6	281.2
85°	99.0	102.2	54.3	35.1	22.4	19.2	12.8	12.8	9.6	9.6	9.6
87.5°	12.8	12.8	9.6	9.6	6.4	6.4	6.4	6.4	3.2	3.2	3.2
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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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-157-8

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-30-840-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-30-840-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

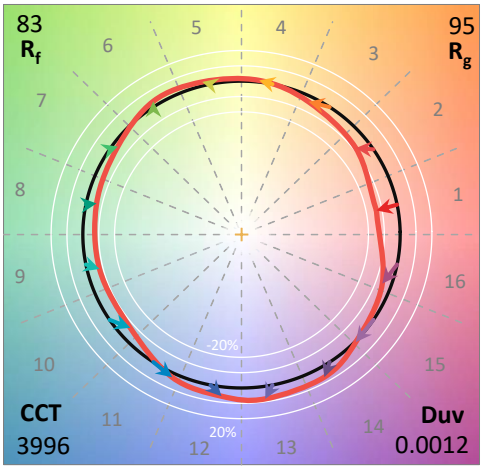
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-157-8
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	09/05/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Streetworks
Catalog Number:	**MEM2-HTN-SA-30-840-U-5WQ**
Description:	Epic Modern Light Square 30W 5WQ Optic

Spectral Parameters

CCT (K):	3996
CIE u':	0.2245
CIE v':	0.5031
Duv:	0.0012
CIE x:	0.3815
CIE y:	0.3799
CIE z:	0.2386
Peak Wavelength (nm):	449
Dominant Wavelength (nm):	578
Purity:	28.49233
Rf:	82.6
Rg:	95.1

CRI (Ra):	80.6
R1:	78.1
R2:	87.1
R3:	94.5
R4:	79.7
R5:	78.7
R6:	82.7
R7:	84.3
R8:	59.5
R9:	-5.8
R10:	70.3
R11:	78.7
R12:	60.5
R13:	80.2
R14:	97.2
R15:	70.6



Test Conditions

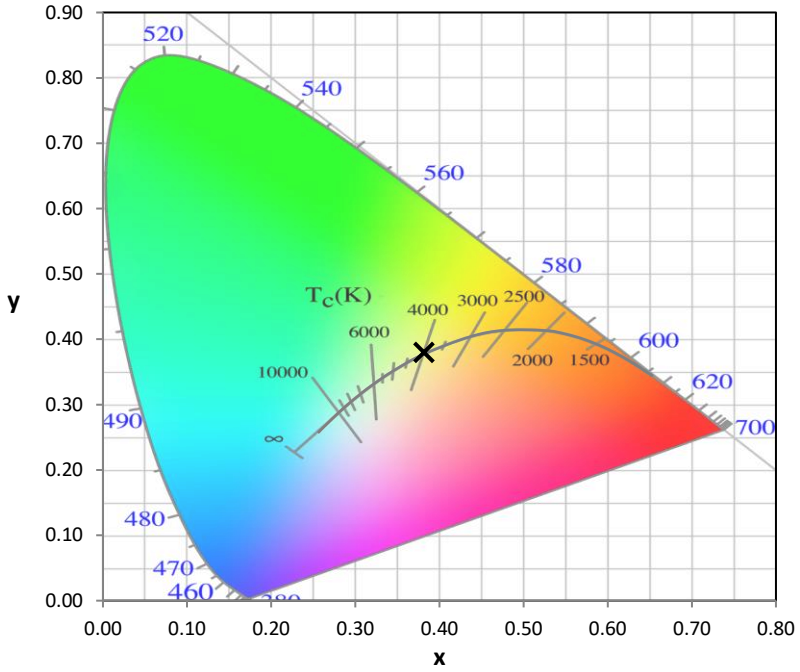
Stabilization Time:	29M
Operation Time:	1H 29M
Sphere Temperature (°C):	24.3

REPORT NUMBER: SP1-2407-157-8

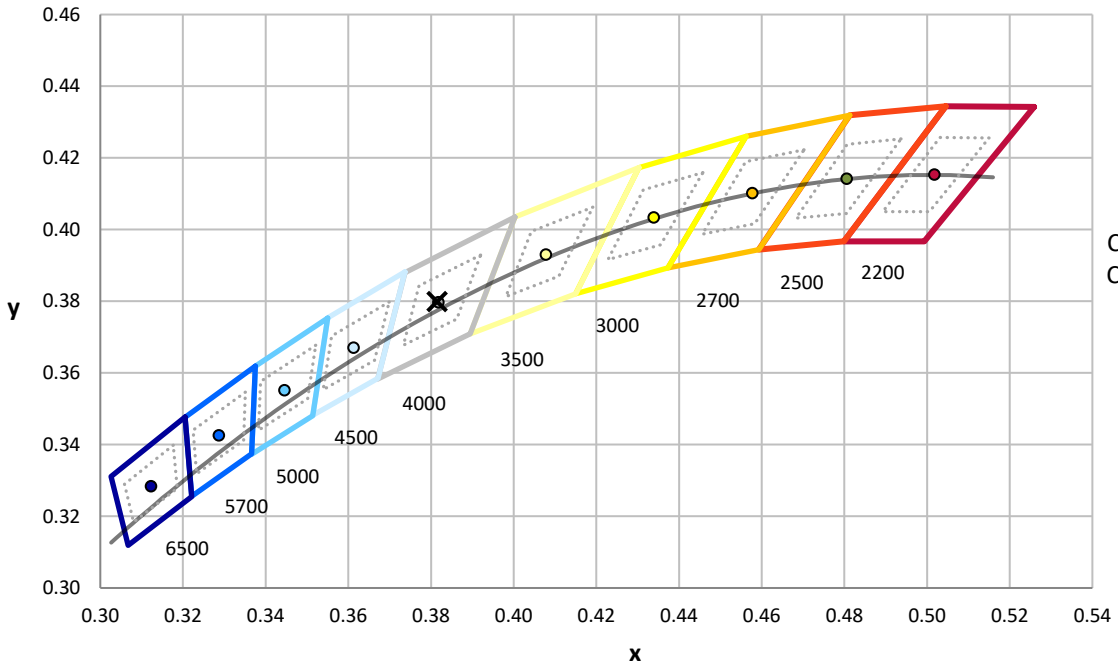
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-157-8

CIE 1931 Chromaticity Diagram



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

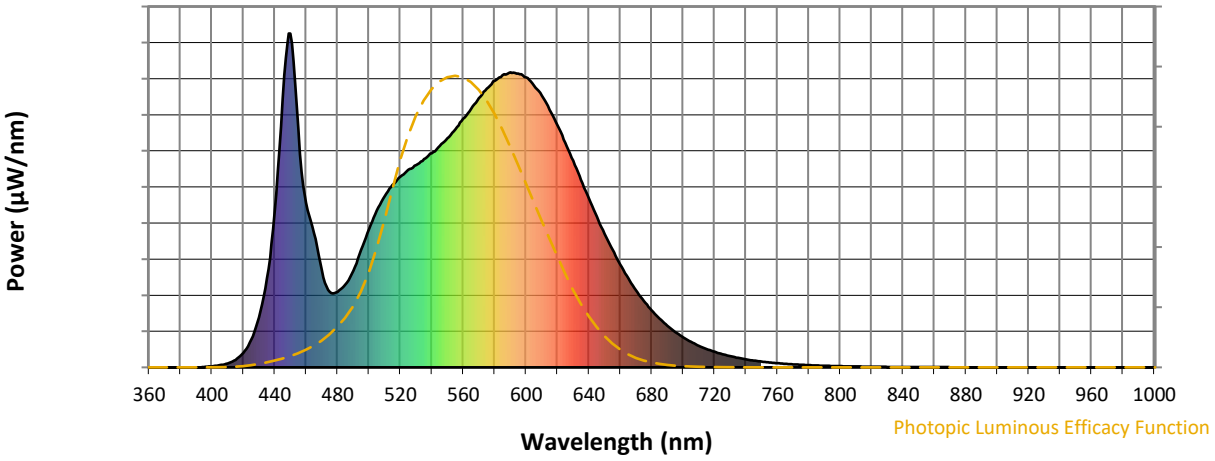


CCT = 3996K
CIE x = 0.3815
CIE y = 0.3799
Duv = 0.0012

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-8

Photopic Flux vs. Wavelength

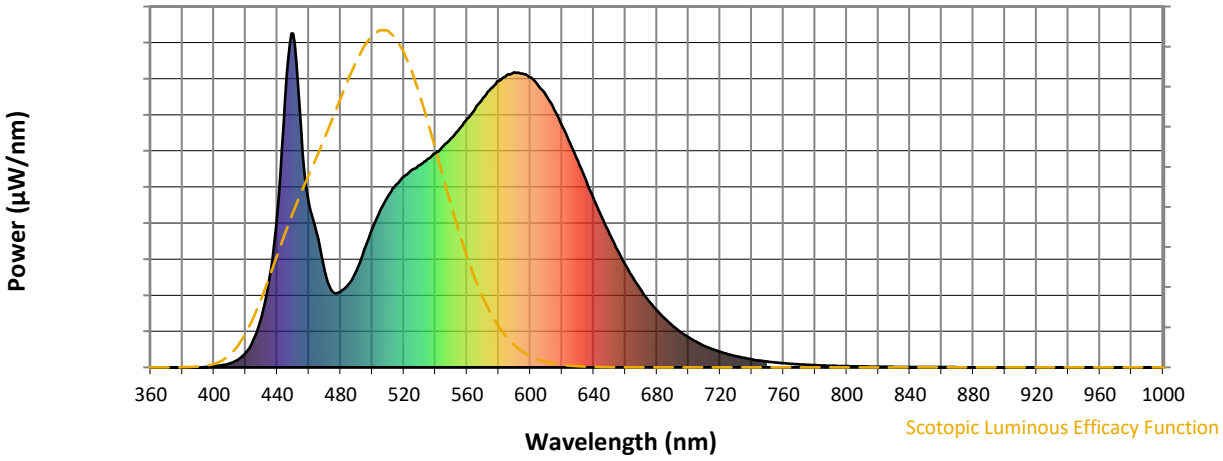


Photopic Lumens: NR

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	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

REPORT NUMBER: SP1-2407-157-8

Scotopic Flux vs. Wavelength

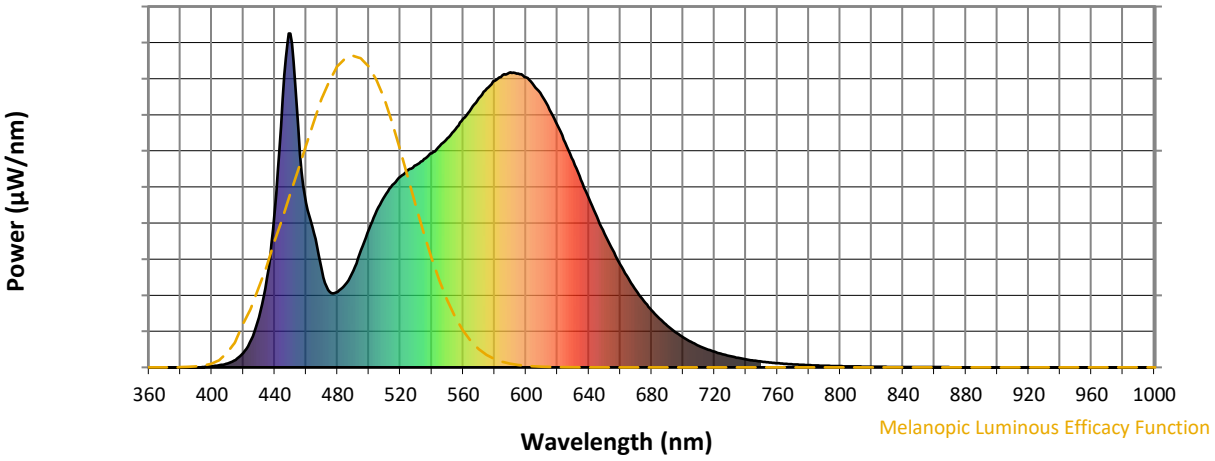


Scotopic Lumens: NR **S/P: 1.66**

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	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

REPORT NUMBER: SP1-2407-157-8

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.37**

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	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

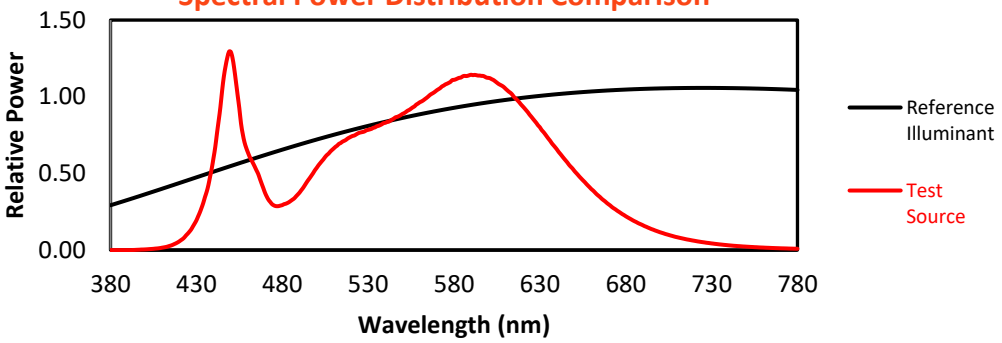
REPORT NUMBER: SP1-2407-157-8

TM-30-18

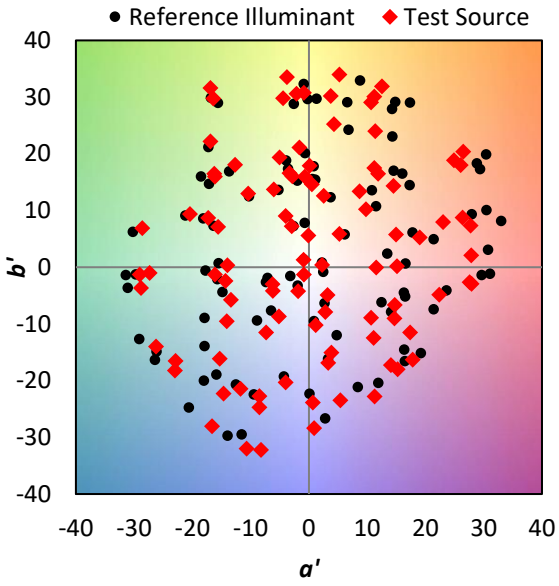
Summary

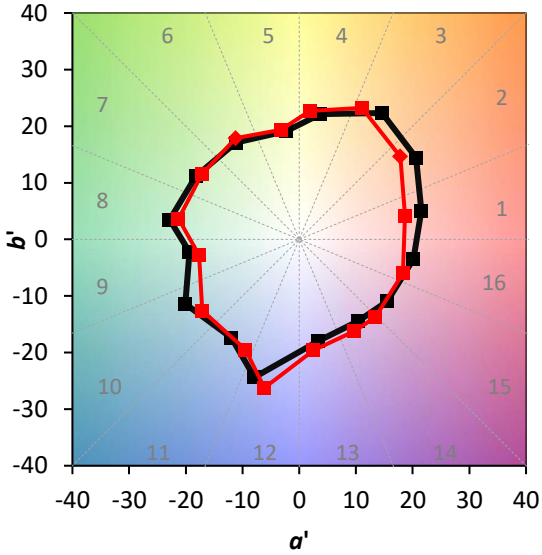
R_f = 82.6
R_g = 95.1
CIE R_a = 80.6
R_9 = -5.8

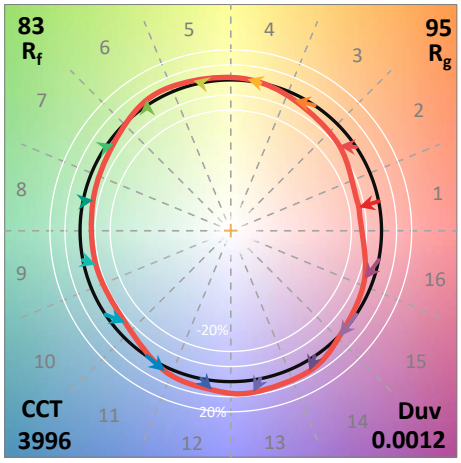
Spectral Power Distribution Comparison

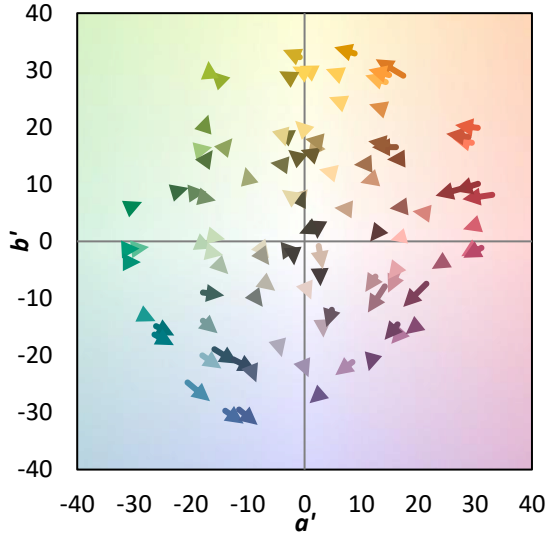


Color Vector Graphics







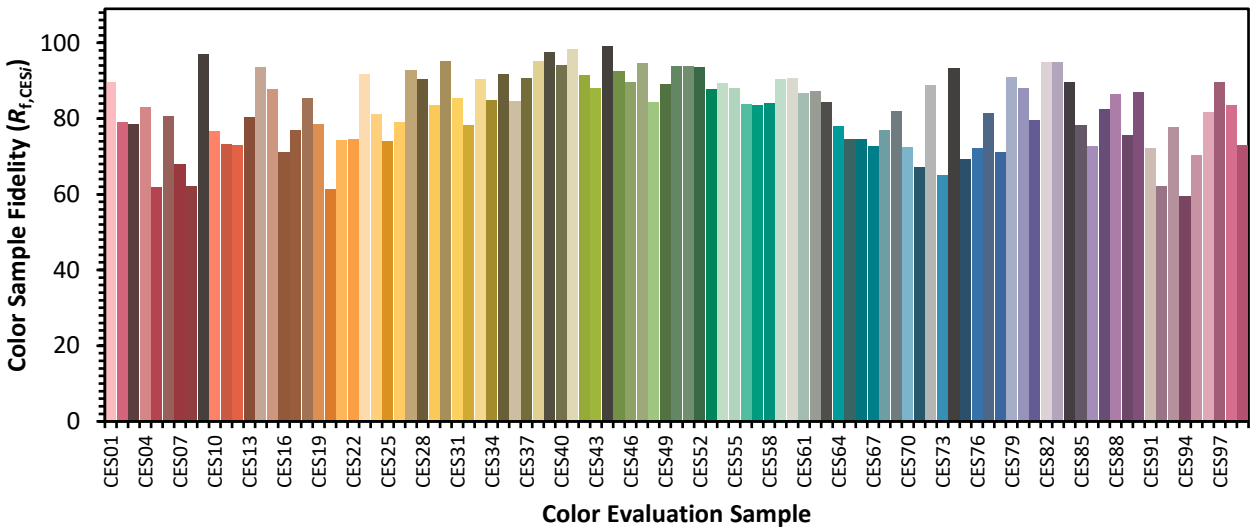


REPORT NUMBER: SP1-2407-157-8

TM-30-18

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

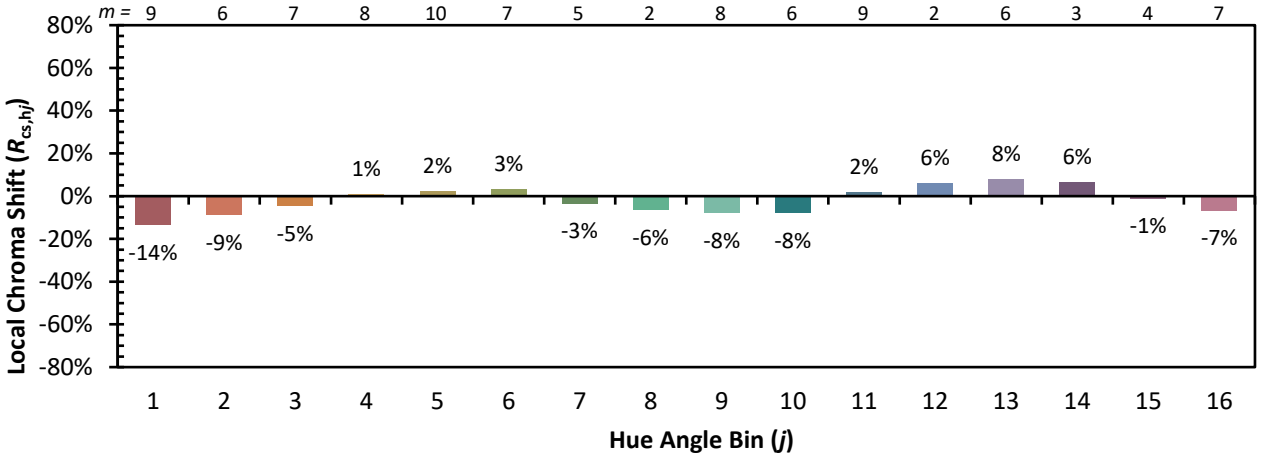
CES01 = 85	CES26 = 79	CES51 = 94	CES76 = 72
CES02 = 61	CES27 = 93	CES52 = 94	CES77 = 82
CES03 = 31	CES28 = 90	CES53 = 88	CES78 = 71
CES04 = 69	CES29 = 83	CES54 = 89	CES79 = 91
CES05 = 48	CES30 = 95	CES55 = 88	CES80 = 88
CES06 = 50	CES31 = 86	CES56 = 84	CES81 = 80
CES07 = 40	CES32 = 78	CES57 = 84	CES82 = 95
CES08 = 39	CES33 = 90	CES58 = 84	CES83 = 95
CES09 = 29	CES34 = 85	CES59 = 90	CES84 = 90
CES10 = 74	CES35 = 92	CES60 = 91	CES85 = 78
CES11 = 57	CES36 = 85	CES61 = 87	CES86 = 73
CES12 = 63	CES37 = 91	CES62 = 87	CES87 = 83
CES13 = 42	CES38 = 95	CES63 = 84	CES88 = 86
CES14 = 74	CES39 = 98	CES64 = 78	CES89 = 76
CES15 = 71	CES40 = 94	CES65 = 75	CES90 = 87
CES16 = 46	CES41 = 98	CES66 = 75	CES91 = 72
CES17 = 49	CES42 = 92	CES67 = 73	CES92 = 62
CES18 = 56	CES43 = 88	CES68 = 77	CES93 = 78
CES19 = 71	CES44 = 99	CES69 = 82	CES94 = 60
CES20 = 65	CES45 = 93	CES70 = 72	CES95 = 70
CES21 = 86	CES46 = 90	CES71 = 67	CES96 = 82
CES22 = 78	CES47 = 95	CES72 = 89	CES97 = 90
CES23 = 91	CES48 = 84	CES73 = 65	CES98 = 84
CES24 = 90	CES49 = 89	CES74 = 93	CES99 = 73
CES25 = 71	CES50 = 94	CES75 = 69	

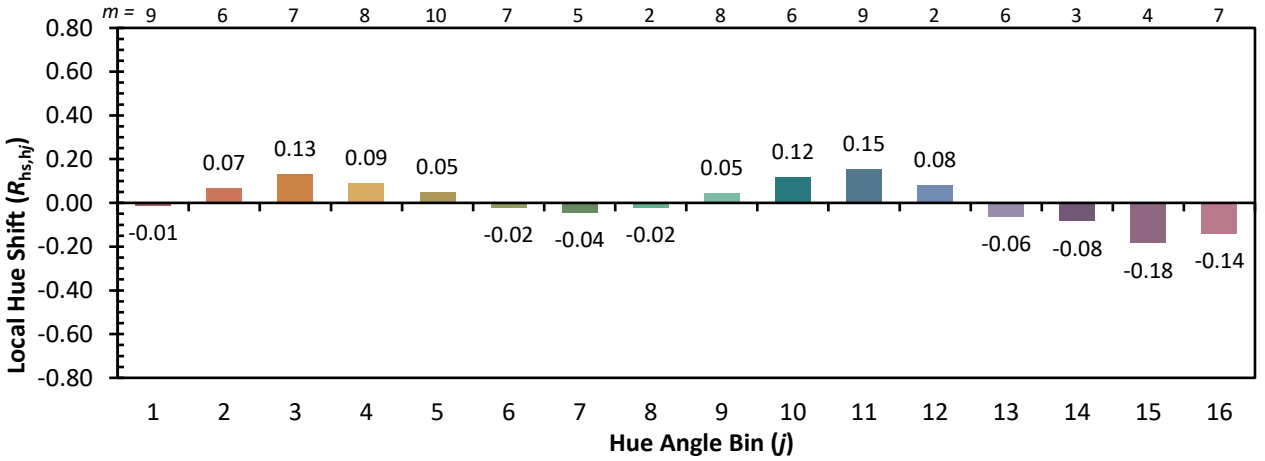


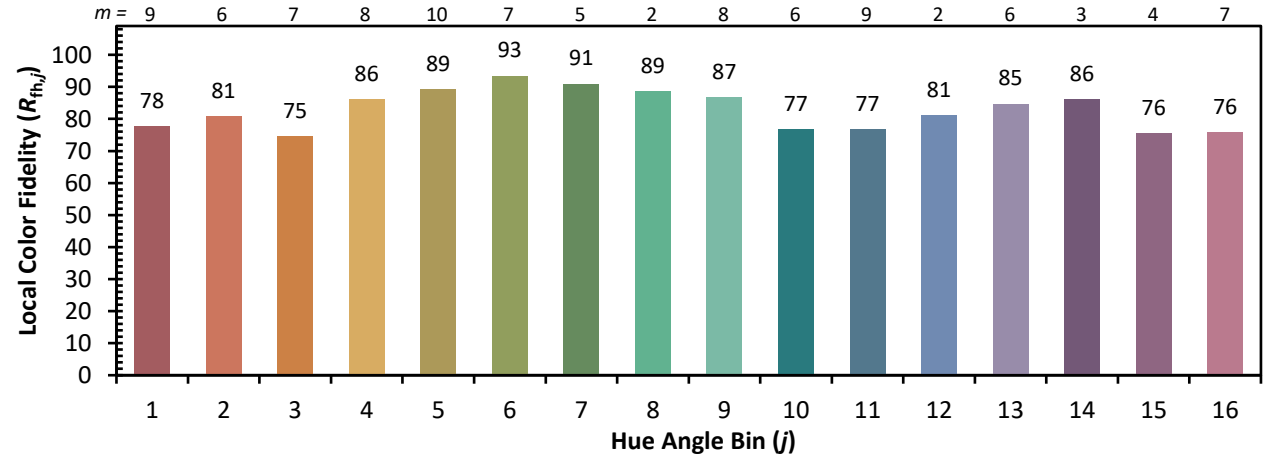
REPORT NUMBER: SP1-2407-157-8

TM-30-18

Color Rendition by Hue-Angle Bin



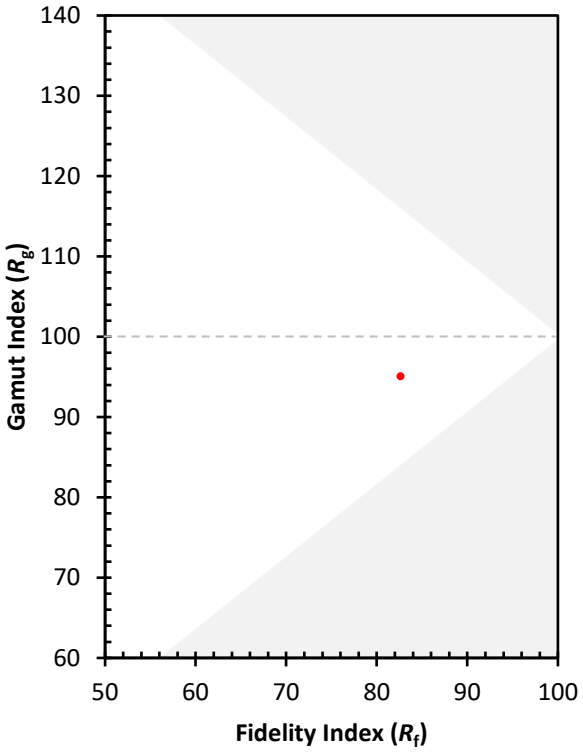


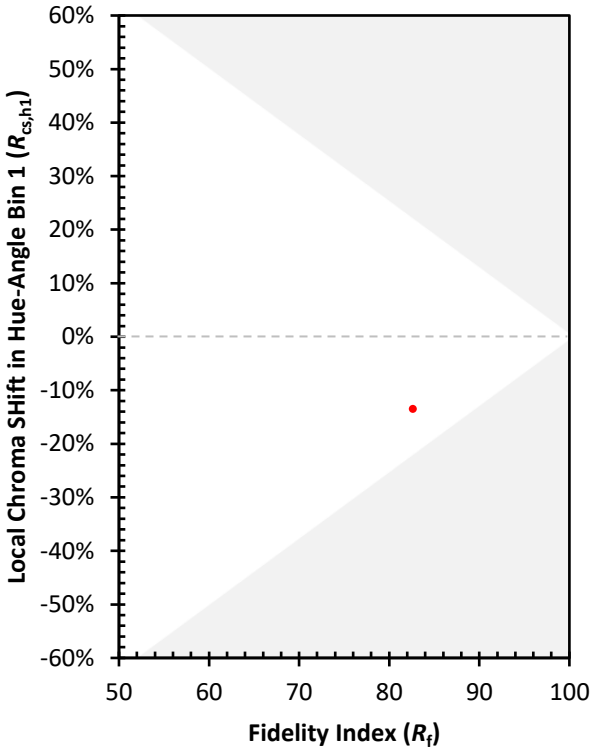


REPORT NUMBER: SP1-2407-157-8

TM-30-18

Measure Comparisons





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