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: P870613

Luminaire Tested: **EMM2-HTN-SA3B-840-U-T1**

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:	P870613
Test Lab:	INNOVATION CENTER(G3)
Issue Date:	09/05/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	INVUE
Catalog Number:	EMM2-HTN-SA3B-840-U-T1
Description:	EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 150W 80CRI 4000K FIXTURE w/ TYPE 1 DISTRIBUTION OPTIC
Light Source:	(30) 4000K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	18804.5 lumens
Efficiency:	N/A
Efficacy:	140.3 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.33' x H: 0')
IES Classification:	Type I - Short
BUG Rating:	B3 - U0 - G3

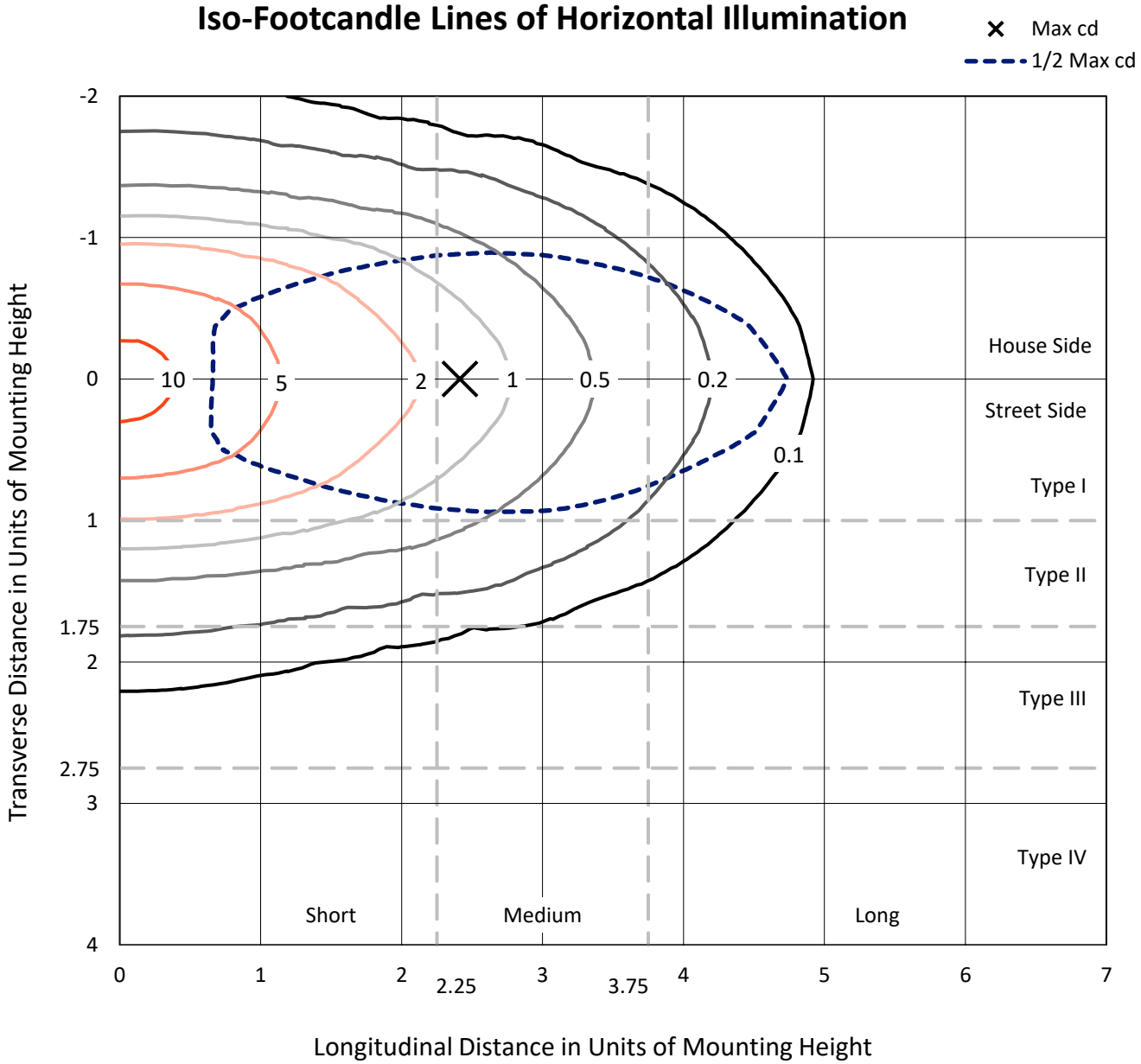
Input Watts (W):	134
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.99
Total Harmonic Distortion (THDi):	6.70%
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P870613
CATALOG NUMBER: EMM2-HTN-SA3B-840-U-T1

Iso-Footcandle Lines of Horizontal Illumination



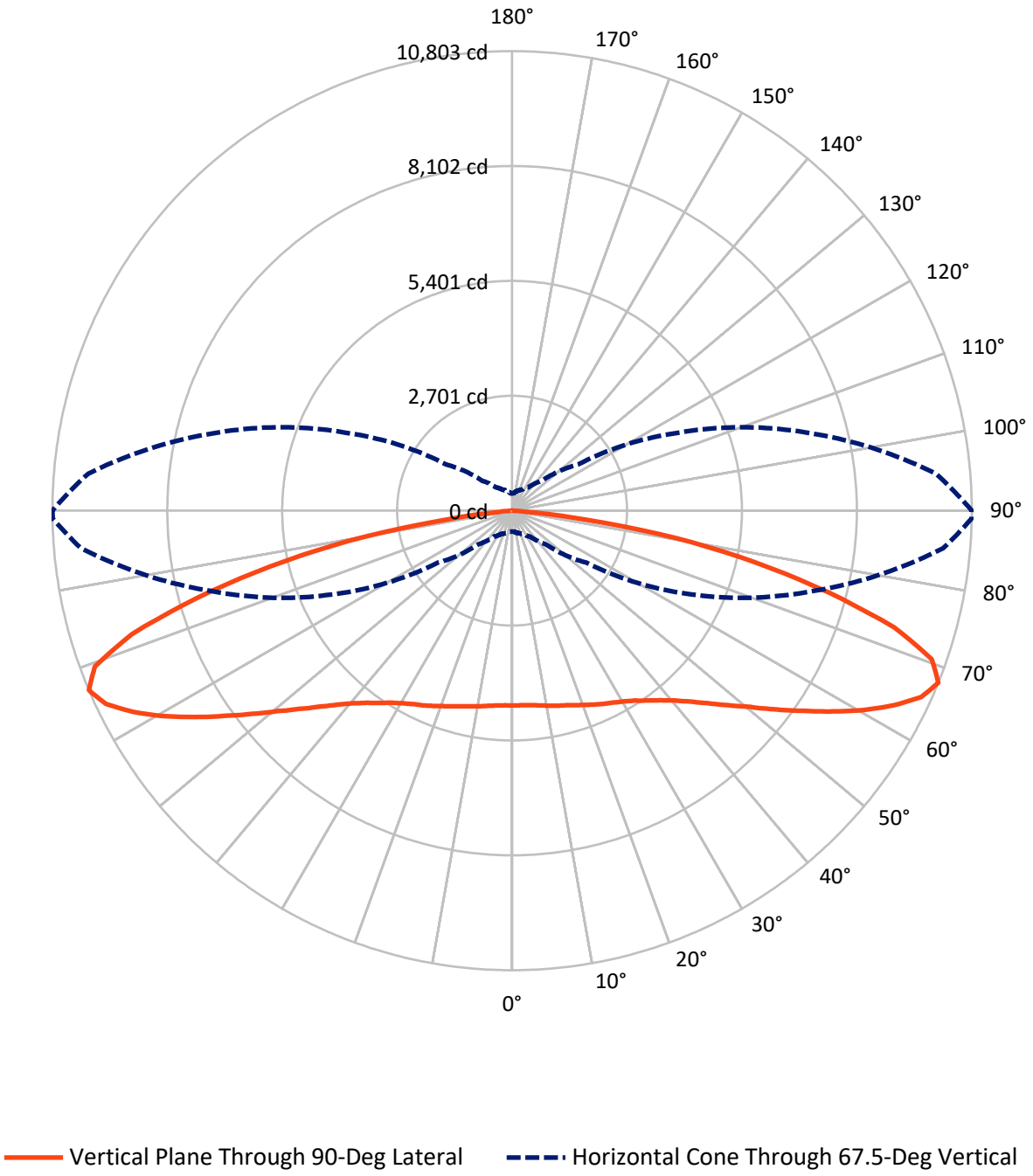
Based on 20 foot mounting height. Maximum calculated value = 11.5 fc
Type I - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P870613
CATALOG NUMBER: EMM2-HTN-SA3B-840-U-T1

Luminous Intensity Polar Plot



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

Scaled Data Report

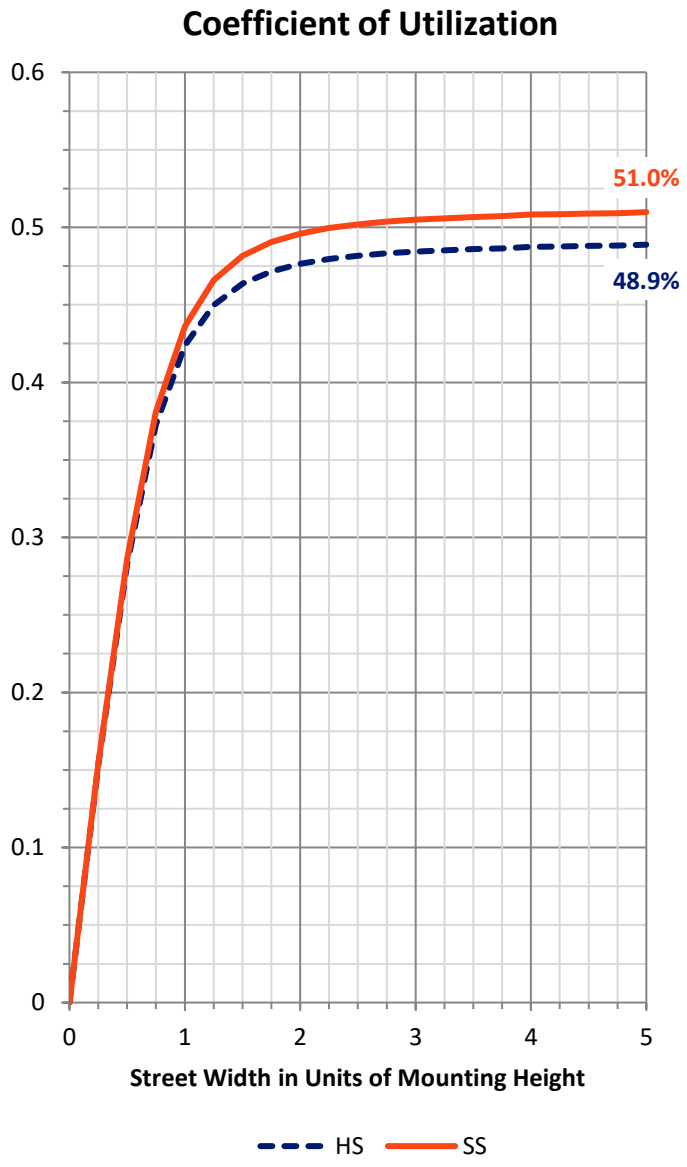
REPORT NUMBER: P870613
CATALOG NUMBER: EMM2-HTN-SA3B-840-U-T1

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9235.3	0.0	9235.3
	% Fixture	49.1	0.0	49.1
Street Side	Lumens	9569.2	0.0	9569.2
	% Fixture	50.9	0.0	50.9
Total	Lumens	18804.5	0.0	18804.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	439.1	2.3
10°-20°	1319.5	7.0
20°-30°	2183.8	11.6
30°-40°	2895.7	15.4
40°-50°	3264.8	17.4
50°-60°	3346.9	17.8
60°-70°	3161.1	16.8
70°-80°	1939.7	10.3
80°-90°	253.8	1.3
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°	18804.5	100.0
0°-180°	18804.5	100.0



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

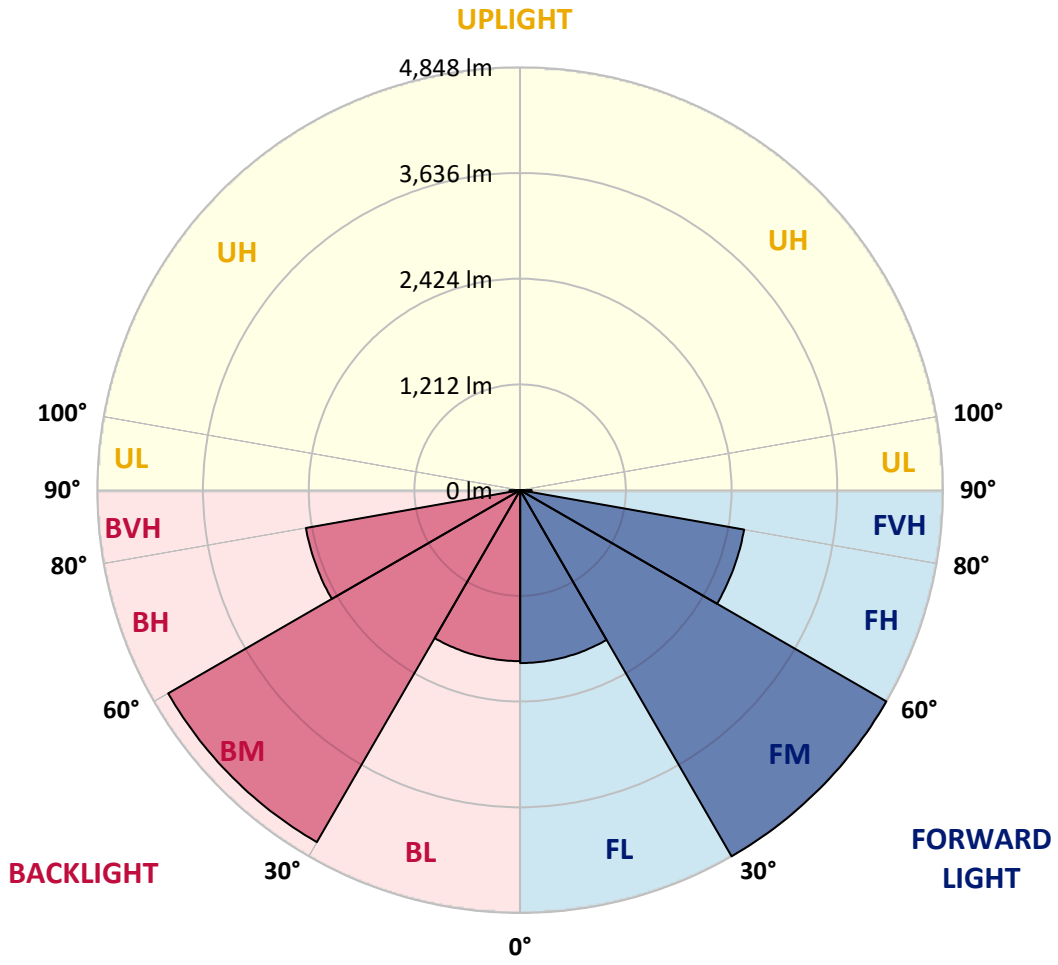
Scaled Data Report

REPORT NUMBER: P870613
CATALOG NUMBER: EMM2-HTN-SA3B-840-U-T1

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1982.5	10.5			
FM	(30°-60°)	4847.6	25.8			
FH	(60°-80°)	2606.9	13.9			G2/5000
FVH	(80°-90°)	132.2	0.7			G2/225
BL	(0°-30°)	1959.9	10.4	B3/2500		
BM	(30°-60°)	4659.9	24.8	B3/5000		
BH	(60°-80°)	2493.9	13.3	B3/2500		G3/2500
BVH	(80°-90°)	121.6	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type I Short



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

Scaled Data Report

REPORT NUMBER: P870613
CATALOG NUMBER: EMM2-HTN-SA3B-840-U-T1

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	89°
0°	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7
2.5°	4599.7	4599.7	4588.9	4570.8	4567.2	4570.8	4592.5	4581.7	4581.7	4585.3	4581.7
5°	4599.7	4599.7	4592.5	4574.5	4574.5	4574.5	4599.7	4588.9	4592.5	4596.1	4596.1
7.5°	4607.0	4607.0	4599.7	4585.3	4585.3	4585.3	4621.4	4614.2	4614.2	4625.0	4617.8
10°	4625.0	4617.8	4610.6	4614.2	4603.3	4621.4	4639.4	4643.1	4657.5	4664.7	4661.1
12.5°	4625.0	4617.8	4599.7	4621.4	4621.4	4646.7	4671.9	4686.4	4704.4	4704.4	4704.4
15°	4603.3	4596.1	4581.7	4617.8	4632.2	4664.7	4700.8	4722.5	4755.0	4755.0	4751.4
17.5°	4578.1	4567.2	4560.0	4614.2	4646.7	4690.0	4744.2	4773.0	4809.1	4812.7	4805.5
20°	4531.1	4527.5	4531.1	4603.3	4661.1	4722.5	4787.5	4827.2	4874.1	4888.6	4877.7
22.5°	4480.6	4480.6	4495.0	4592.5	4682.8	4765.8	4852.5	4903.0	4949.9	4964.4	4949.9
25°	4412.0	4412.0	4440.9	4556.4	4690.0	4812.7	4913.8	4982.4	5025.8	5040.2	5033.0
27.5°	4307.3	4307.3	4339.8	4484.2	4668.3	4848.9	4978.8	5058.3	5105.2	5119.6	5112.4
30°	4159.3	4152.0	4195.4	4375.9	4628.6	4888.6	5054.7	5137.7	5199.1	5209.9	5199.1
32.5°	3924.6	3935.4	4000.4	4227.9	4563.6	4913.8	5144.9	5242.4	5311.0	5332.7	5325.4
35°	3639.3	3657.4	3747.7	4040.1	4440.9	4910.2	5238.8	5357.9	5448.2	5477.1	5473.5
37.5°	3300.0	3325.2	3437.2	3780.2	4256.7	4856.1	5325.4	5487.9	5607.1	5643.2	5650.4
40°	2928.1	2953.4	3097.8	3476.9	4007.6	4729.7	5376.0	5635.9	5794.8	5867.0	5877.8
42.5°	2534.5	2577.9	2751.2	3119.4	3707.9	4527.5	5376.0	5780.4	5975.3	6108.9	6119.7
45°	2155.4	2191.6	2401.0	2762.0	3386.6	4267.6	5314.6	5924.8	6220.8	6451.9	6444.7
47.5°	1826.9	1837.7	2029.1	2393.7	3029.2	3971.5	5188.2	6054.7	6480.8	6787.7	6852.7
50°	1487.5	1512.8	1675.3	2036.3	2664.5	3646.6	4975.2	6137.8	6748.0	7213.7	7296.7
52.5°	1249.2	1252.8	1375.6	1707.7	2285.4	3253.0	4718.9	6159.5	7004.3	7675.8	7776.9
55°	1018.2	1036.2	1140.9	1390.0	1920.8	2866.7	4386.7	6127.0	7239.0	8123.5	8311.3
57.5°	873.7	877.3	953.2	1151.7	1621.1	2455.1	4018.4	6018.6	7433.9	8618.2	8856.5
60°	751.0	751.0	808.7	960.4	1310.6	2054.4	3585.2	5827.3	7542.3	9148.9	9495.5
62.5°	653.5	657.1	707.7	819.6	1090.4	1696.9	3108.6	5527.6	7582.0	9661.6	10058.8
65°	592.1	595.7	624.6	700.4	899.0	1379.2	2621.2	5163.0	7527.8	10044.3	10560.6
67.5°	*491.0*	*494.6*	*545.2*	*602.9*	*747.4*	*1108.4*	*2130.2*	*4657.5*	*7307.6*	*10163.5*	*10795.3*
70°	375.5	386.3	454.9	516.3	621.0	884.6	1635.5	3989.6	6780.5	9759.1	10409.0
72.5°	314.1	317.7	368.3	436.9	519.9	693.2	1242.0	3141.1	5978.9	8715.7	9437.8
75°	274.4	278.0	306.9	368.3	433.3	556.0	862.9	2169.9	4769.4	7047.6	7708.3
77.5°	249.1	252.7	260.0	310.5	364.7	429.6	610.2	1288.9	3365.0	5386.8	5733.4
80°	238.3	238.3	220.2	256.3	299.7	335.8	408.0	740.1	2159.1	3632.1	3910.1
82.5°	169.7	166.1	151.6	158.9	184.1	184.1	209.4	306.9	826.8	1534.4	1664.4
85°	10.8	10.8	18.1	21.7	32.5	43.3	54.2	72.2	209.4	285.2	296.1
87.5°	3.6	3.6	3.6	3.6	3.6	7.2	7.2	7.2	10.8	14.4	14.4
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

Scaled Data Report

REPORT NUMBER: P870613
CATALOG NUMBER: EMM2-HTN-SA3B-840-U-T1

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7	4581.7
2.5°	4578.1	4581.7	4581.7	4588.9	4596.1	4592.5	4588.9	4596.1	4585.3	4563.6	4560.0
5°	4592.5	4592.5	4588.9	4596.1	4603.3	4596.1	4588.9	4588.9	4581.7	4560.0	4556.4
7.5°	4621.4	4617.8	4617.8	4617.8	4617.8	4607.0	4596.1	4588.9	4578.1	4556.4	4545.6
10°	4661.1	4657.5	4653.9	4650.3	4632.2	4621.4	4603.3	4592.5	4578.1	4552.8	4545.6
12.5°	4704.4	4697.2	4690.0	4693.6	4657.5	4625.0	4607.0	4581.7	4570.8	4513.1	4502.2
15°	4747.8	4736.9	4733.3	4718.9	4682.8	4635.8	4599.7	4563.6	4527.5	4473.4	4455.3
17.5°	4805.5	4798.3	4776.6	4762.2	4711.7	4646.7	4592.5	4542.0	4495.0	4430.0	4419.2
20°	4874.1	4866.9	4845.2	4816.4	4751.4	4671.9	4596.1	4516.7	4458.9	4383.1	4365.1
22.5°	4949.9	4939.1	4921.1	4888.6	4805.5	4711.7	4607.0	4502.2	4415.6	4328.9	4318.1
25°	5029.4	5022.2	5004.1	4957.2	4866.9	4751.4	4607.0	4451.7	4343.4	4267.6	4235.1
27.5°	5105.2	5101.6	5079.9	5025.8	4931.9	4780.3	4574.5	4368.7	4224.2	4123.2	4101.5
30°	5202.7	5195.5	5170.2	5108.8	5004.1	4798.3	4509.5	4227.9	4047.3	3935.4	3902.9
32.5°	5321.8	5314.6	5278.5	5202.7	5090.8	4801.9	4415.6	4047.3	3809.0	3689.9	3650.2
35°	5480.7	5466.2	5419.3	5329.0	5173.8	4765.8	4249.5	3816.3	3523.8	3368.6	3314.4
37.5°	5654.0	5635.9	5574.6	5462.6	5231.6	4668.3	4014.8	3505.8	3173.6	2989.5	2949.7
40°	5867.0	5841.7	5747.9	5592.6	5253.2	4498.6	3751.3	3188.0	2834.2	2632.0	2585.1
42.5°	6134.2	6090.9	5939.2	5737.0	5209.9	4267.6	3437.2	2859.5	2455.1	2267.4	2256.5
45°	6455.5	6386.9	6159.5	5877.8	5116.0	3978.7	3105.0	2491.2	2104.9	1920.8	1873.8
47.5°	6834.6	6751.6	6415.8	5986.2	4931.9	3682.7	2747.6	2133.8	1780.0	1592.2	1556.1
50°	7253.4	7174.0	6686.6	6047.5	4733.3	3336.1	2397.3	1816.1	1462.2	1307.0	1307.0
52.5°	7762.5	7582.0	6946.5	6054.7	4430.0	2953.4	2061.6	1505.6	1227.6	1090.4	1061.5
55°	8304.1	8091.1	7181.2	5989.8	4115.9	2603.1	1700.5	1252.8	1007.3	909.8	884.6
57.5°	8907.0	8582.1	7350.9	5859.8	3718.8	2220.4	1418.9	1032.6	848.5	769.0	758.2
60°	9513.6	9094.8	7452.0	5639.5	3296.4	1866.6	1180.6	862.9	729.3	671.5	660.7
62.5°	10076.8	9513.6	7459.2	5318.2	2884.8	1556.1	967.6	743.8	646.3	602.9	602.9
65°	10564.2	9863.8	7336.5	4906.6	2361.2	1249.2	797.9	628.2	563.2	516.3	505.5
67.5°	10802.5	9997.4	7119.8	4343.4	1891.9	989.3	671.5	545.2	483.8	411.6	404.4
70°	10466.7	9611.1	6563.8	3621.3	1462.2	787.1	559.6	465.7	404.4	343.0	335.8
72.5°	9394.4	8582.1	5664.8	2805.3	1101.2	635.4	465.7	397.2	332.2	299.7	292.4
75°	7686.7	7137.9	4477.0	1931.6	769.0	498.2	389.9	335.8	281.6	267.2	263.6
77.5°	5834.5	5307.4	3271.1	1209.5	527.1	389.9	332.2	285.2	245.5	256.3	249.1
80°	3895.7	3653.8	2173.5	686.0	353.8	285.2	252.7	209.4	187.7	216.6	209.4
82.5°	1769.1	1675.3	1021.8	299.7	158.9	122.8	86.7	65.0	50.5	46.9	54.2
85°	296.1	260.0	72.2	32.5	18.1	10.8	7.2	7.2	3.6	3.6	3.6
87.5°	14.4	10.8	10.8	7.2	3.6	3.6	3.6	3.6	3.6	0.0	0.0
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: SP1-2407-157-8

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-840-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-840-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

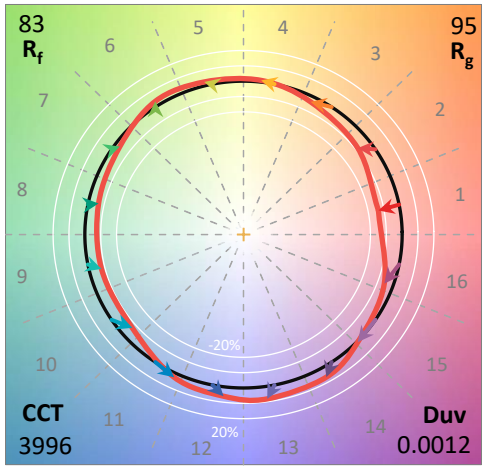
Test Information

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-40-840-U-5WQ**
Description:	Epic Modern Light Square 40W 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

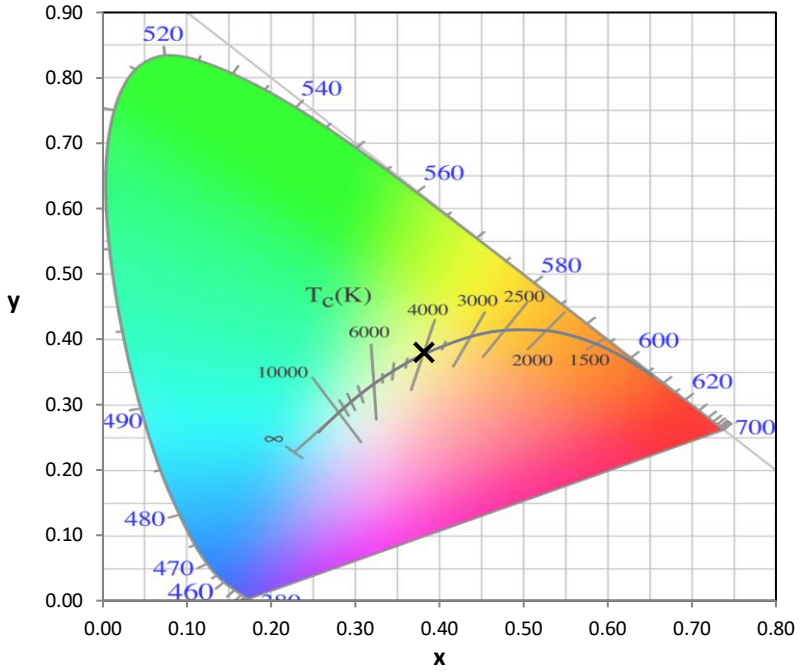
Stabilization Time:	29M
Operation Time:	1H 29M
Sphere Temperature (°C):	24.3

REPORT NUMBER: SP1-2407-157-8

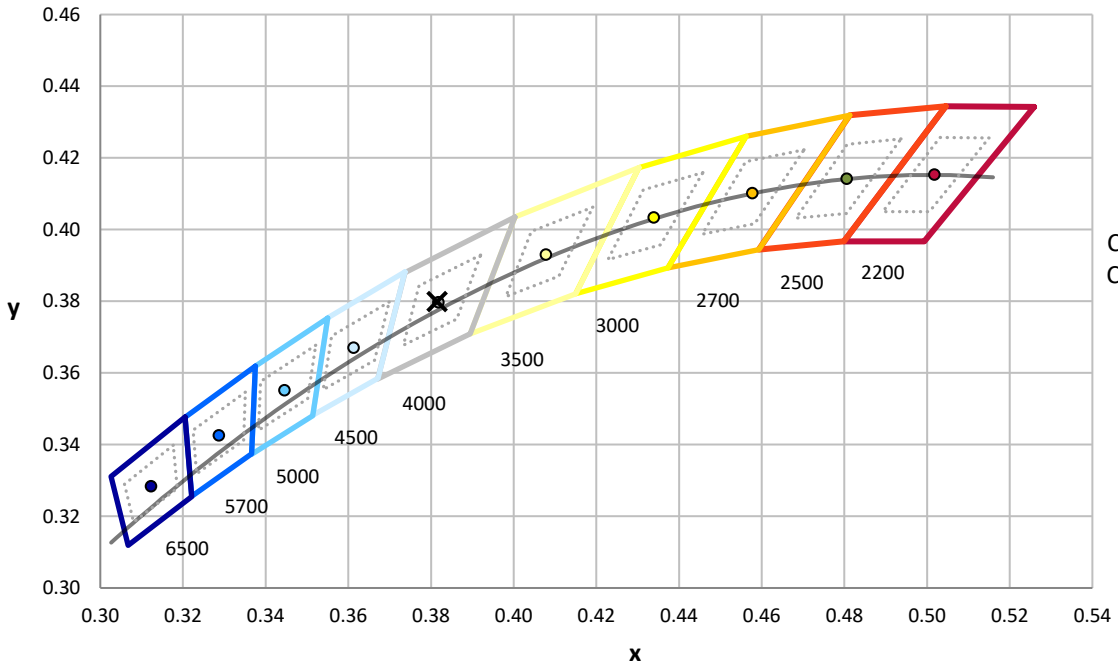
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

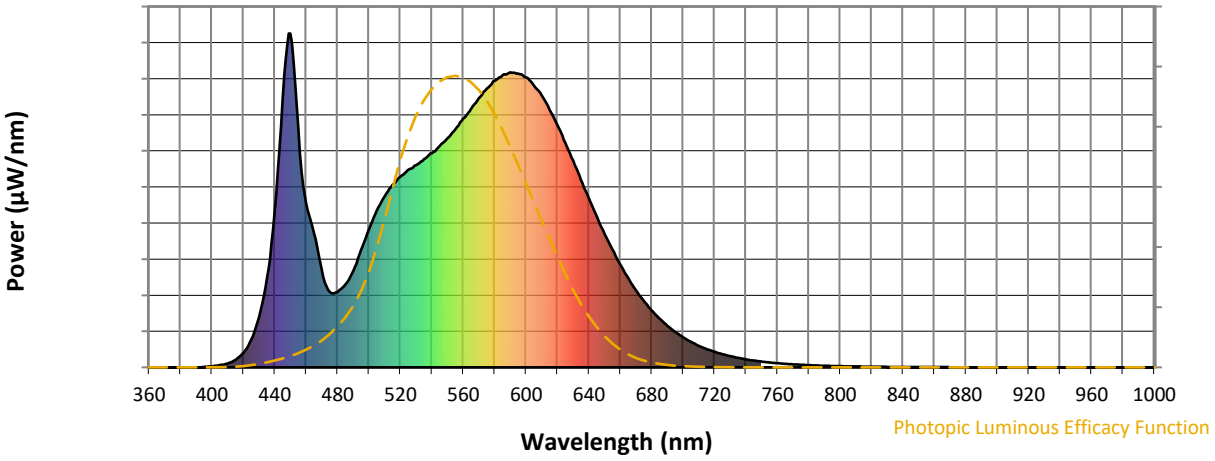


CCT = 3996K
CIE x = 0.3815
CIE y = 0.3799
Duv = 0.0012

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-8

Photopic Flux vs. Wavelength

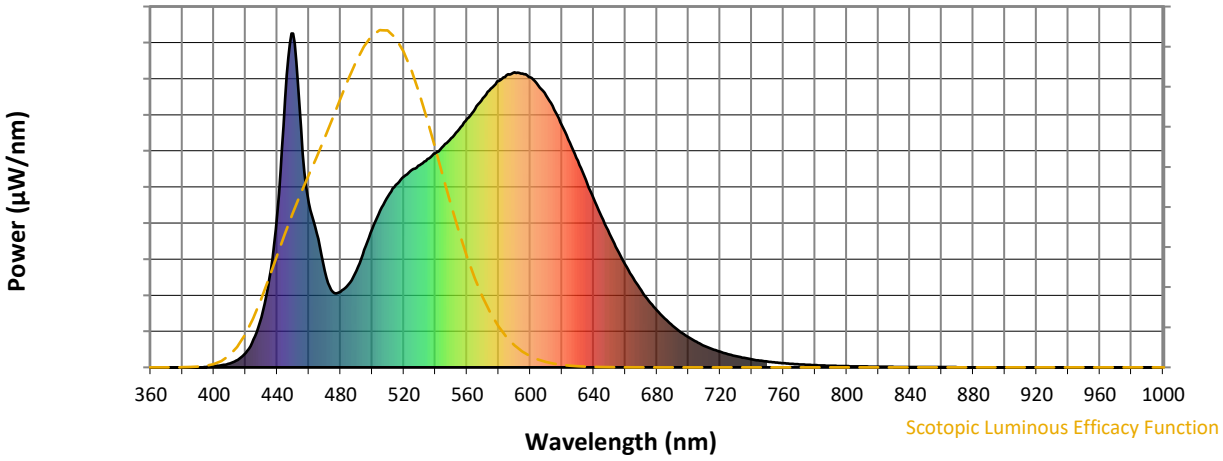


Photopic Lumens: NR

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

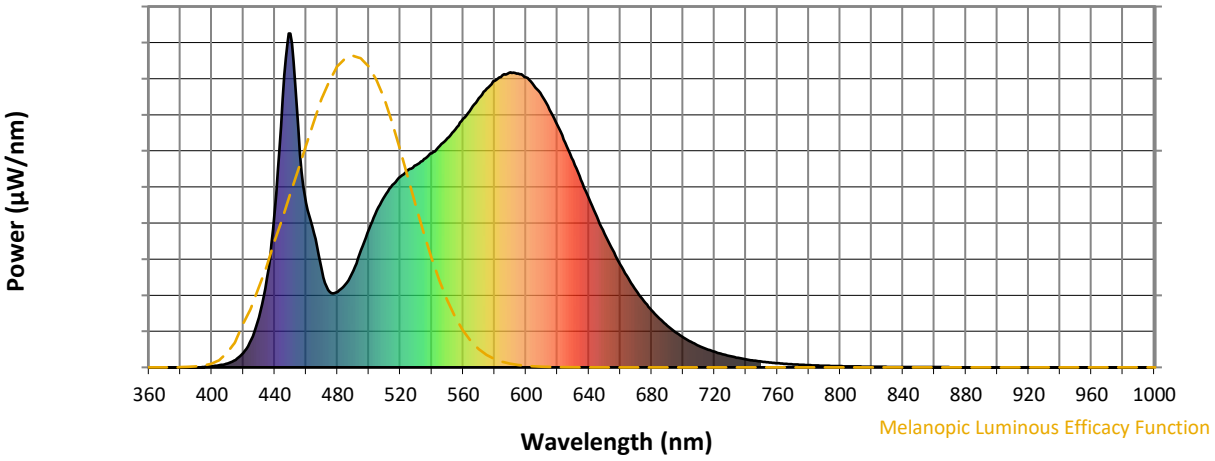


Scotopic Lumens: NR **S/P: 1.66**

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			

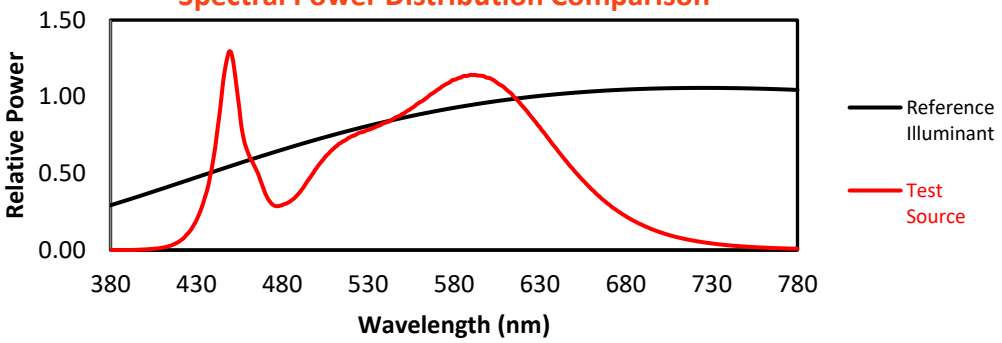
REPORT NUMBER: SP1-2407-157-8

TM-30-18

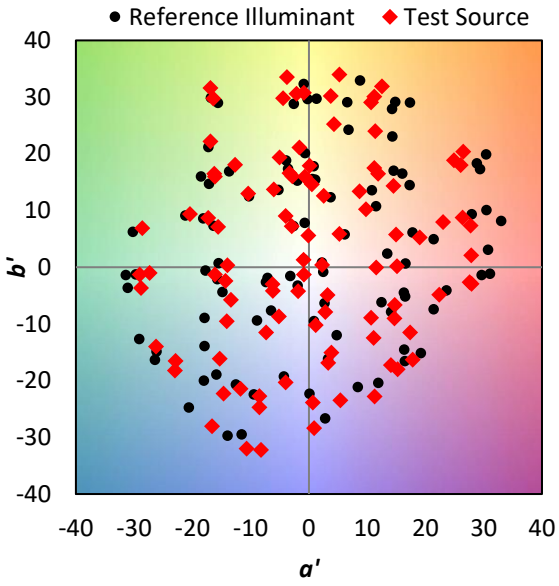
Summary

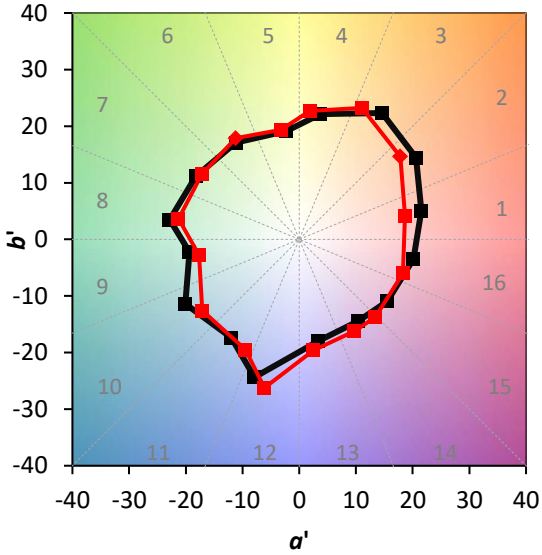
R_f = 82.6
R_g = 95.1
CIE R_a = 80.6
R_9 = -5.8

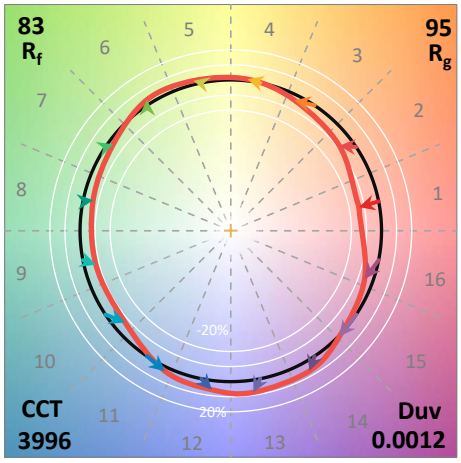
Spectral Power Distribution Comparison

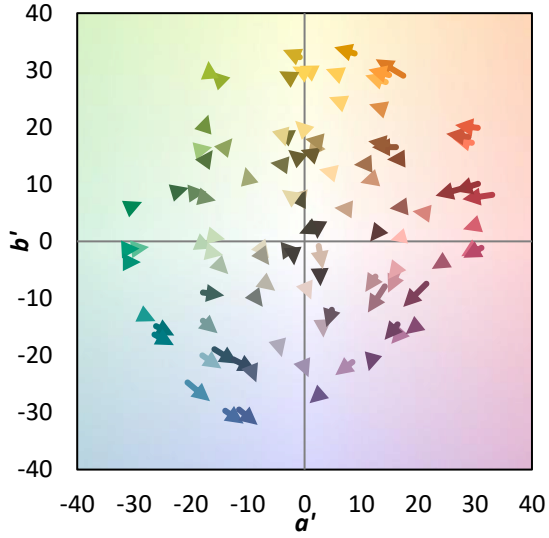


Color Vector Graphics







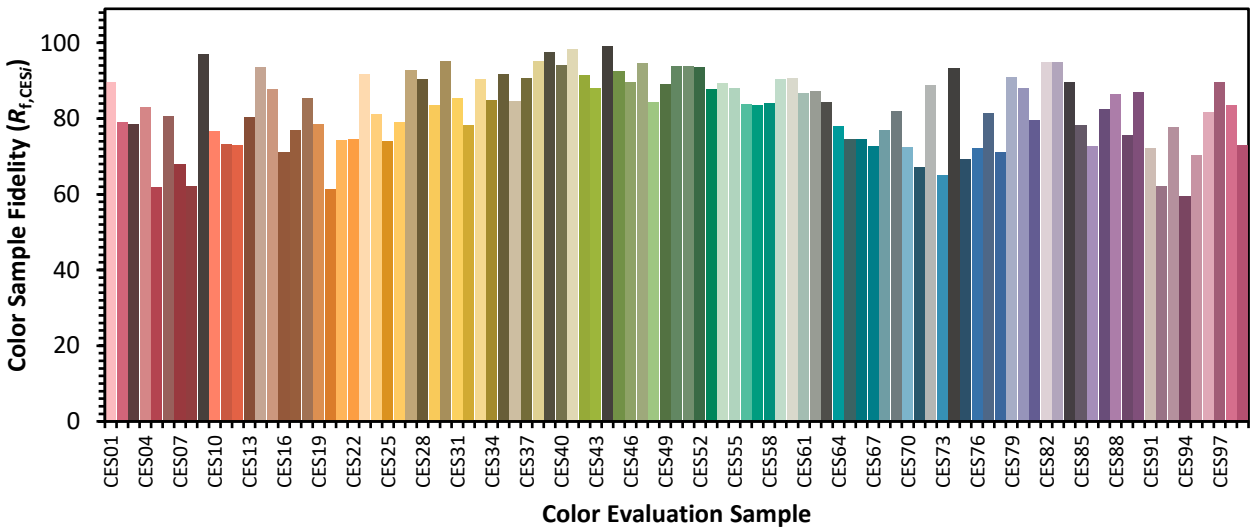


REPORT NUMBER: SP1-2407-157-8

TM-30-18

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

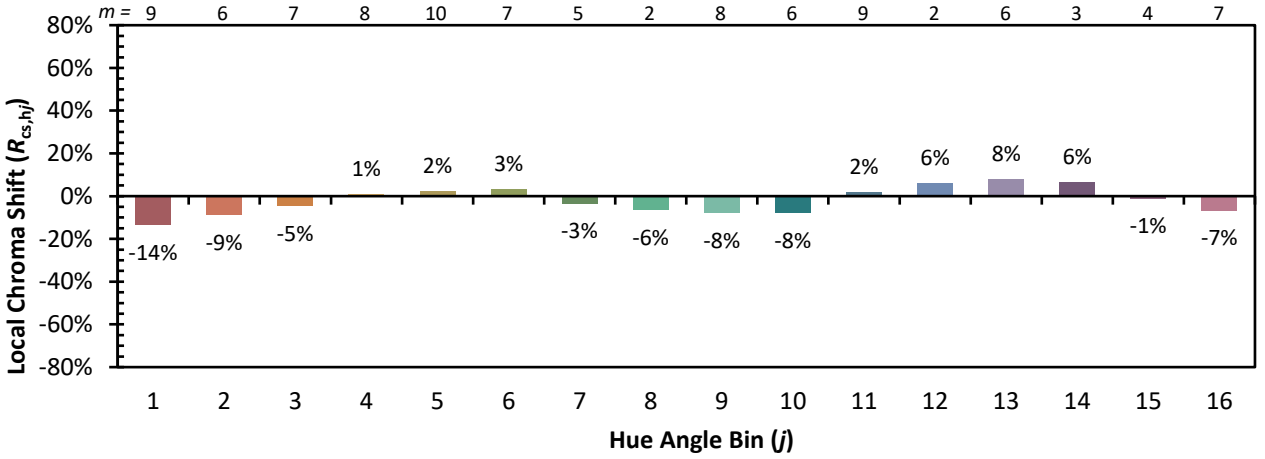
CES01 = 85	CES26 = 79	CES51 = 94	CES76 = 72
CES02 = 61	CES27 = 93	CES52 = 94	CES77 = 82
CES03 = 31	CES28 = 90	CES53 = 88	CES78 = 71
CES04 = 69	CES29 = 83	CES54 = 89	CES79 = 91
CES05 = 48	CES30 = 95	CES55 = 88	CES80 = 88
CES06 = 50	CES31 = 86	CES56 = 84	CES81 = 80
CES07 = 40	CES32 = 78	CES57 = 84	CES82 = 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	

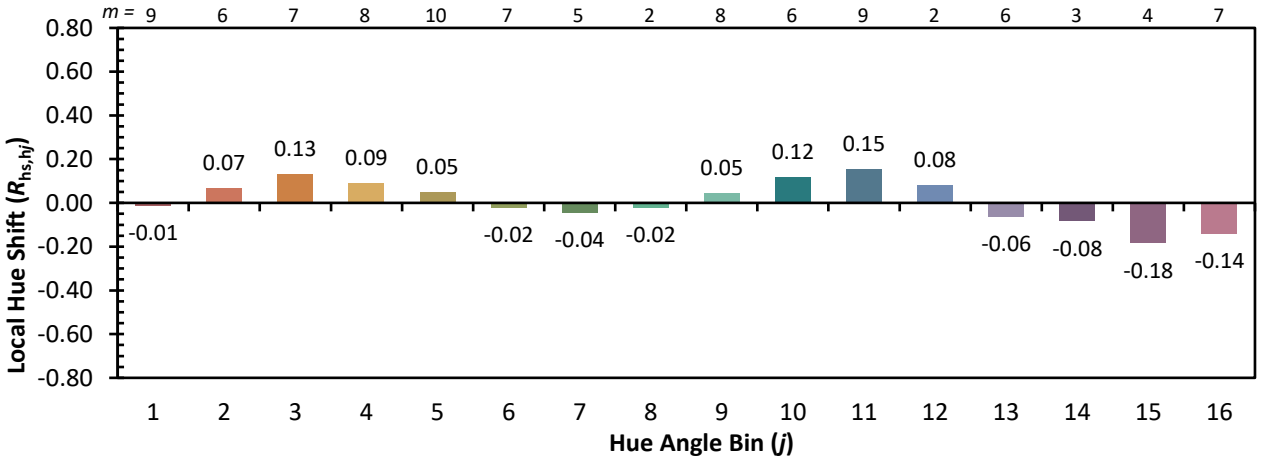


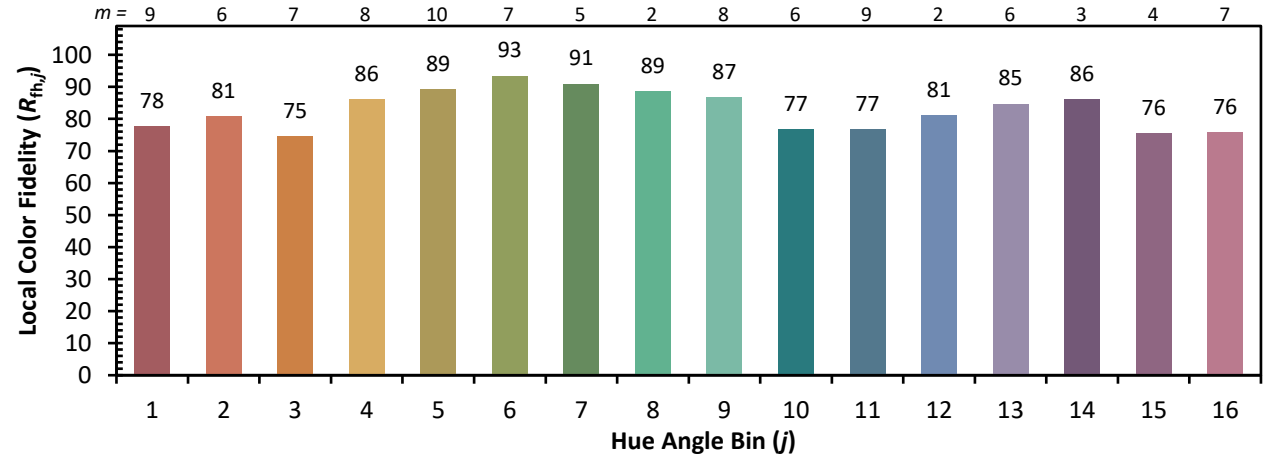
REPORT NUMBER: SP1-2407-157-8

TM-30-18

Color Rendition by Hue-Angle Bin



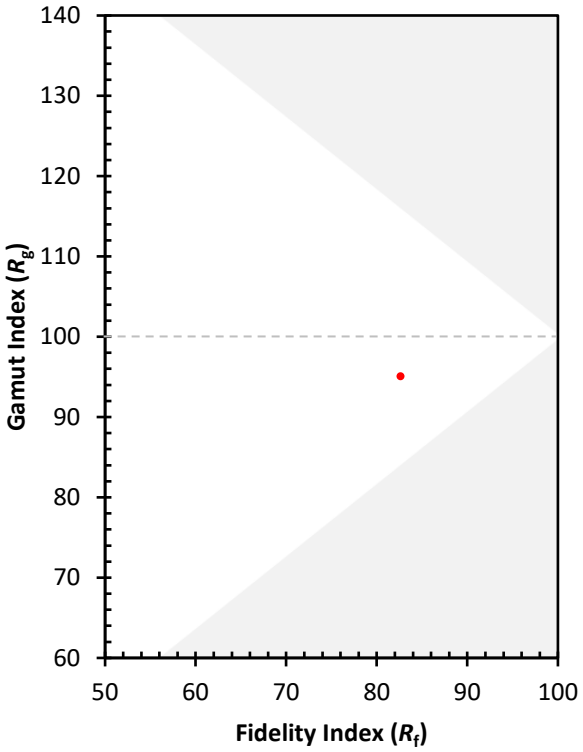


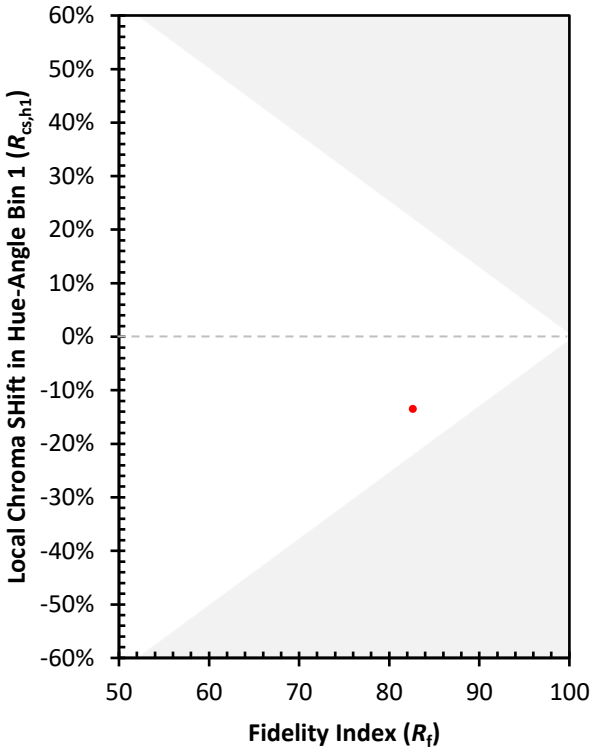


REPORT NUMBER: SP1-2407-157-8

TM-30-18

Measure Comparisons





(END OF REPORT)