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: P870416

Luminaire Tested: **MEM2-HSN-SA-130-830-U-T3-HSS**

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:	P870416
Test Lab:	INNOVATION CENTER(G3)
Issue Date:	09/05/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	STREETWORKS
Catalog Number:	MEM2-HSN-SA-130-830-U-T3-HSS
Description:	EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 130W 80CRI 3000K FIXTURE w/ TYPE III DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD
Light Source:	(30) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	10299 lumens
Efficiency:	N/A
Efficacy:	91.1 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.33' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B1 - U0 - G2

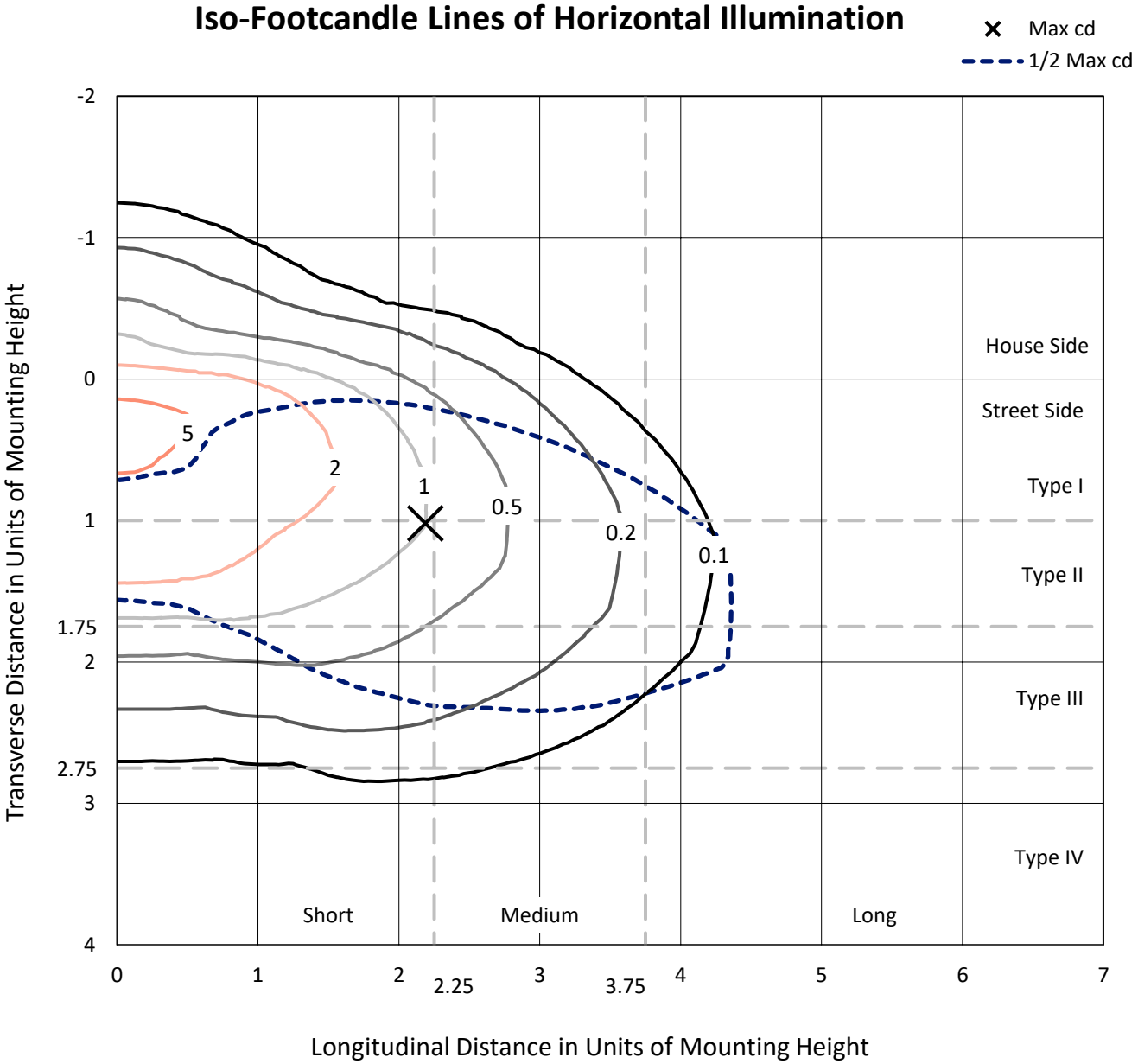
Input Watts (W):	113
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.99
Total Harmonic Distortion (THDi):	7.77%
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P870416
CATALOG NUMBER: MEM2-HSN-SA-130-830-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination



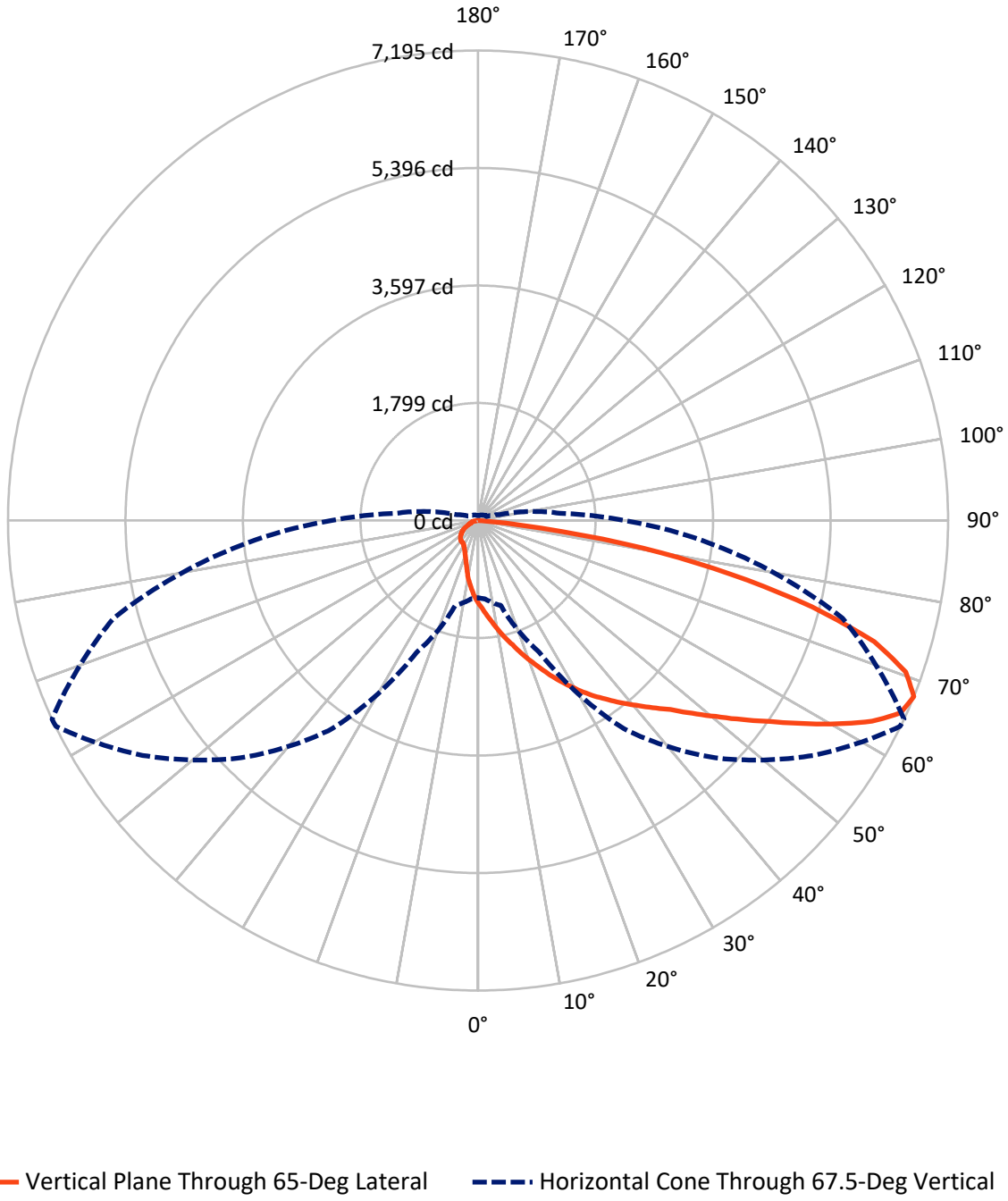
Based on 20 foot mounting height. Maximum calculated value = 5.9 fc
Type III - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P870416
CATALOG NUMBER: MEM2-HSN-SA-130-830-U-T3-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

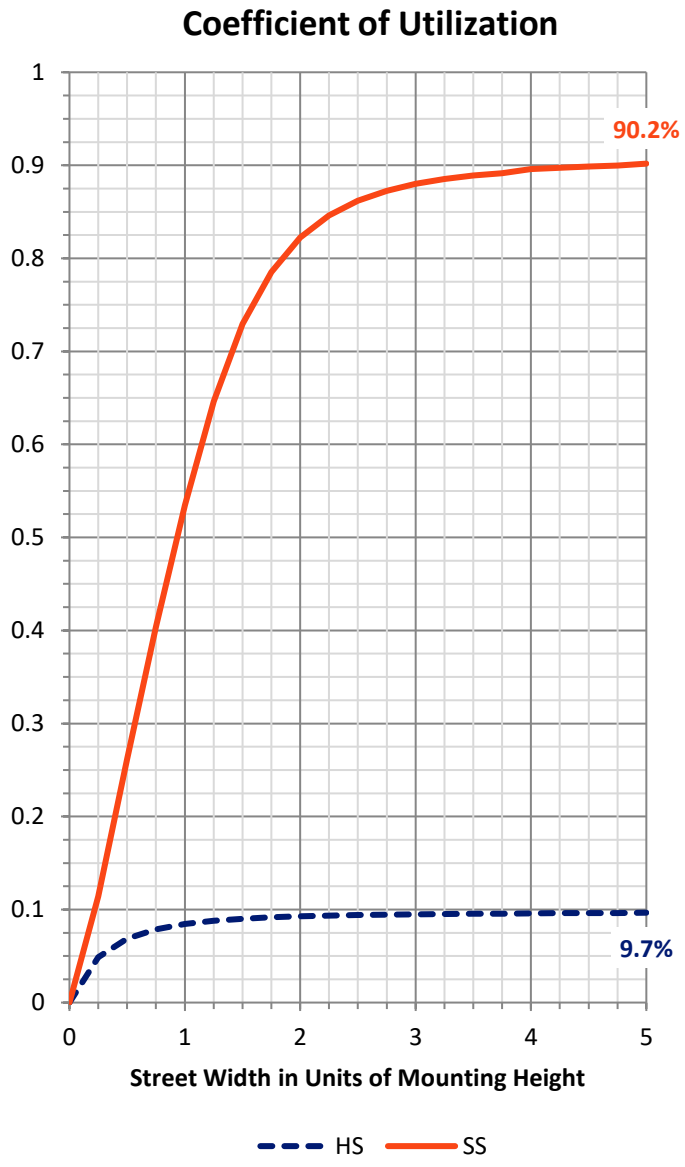
REPORT NUMBER: P870416
CATALOG NUMBER: MEM2-HSN-SA-130-830-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1002.4	0.0	1002.4
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	9296.6	0.0	9296.6
	% Fixture	90.3	0.0	90.3
Total	Lumens	10299.0	0.0	10299.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	1.2
10°-20°	413.3	4.0
20°-30°	752.1	7.3
30°-40°	1164.0	11.3
40°-50°	1759.6	17.1
50°-60°	2289.2	22.2
60°-70°	2258.2	21.9
70°-80°	1374.6	13.3
80°-90°	163.4	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°	10299.0	100.0
0°-180°	10299.0	100.0



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

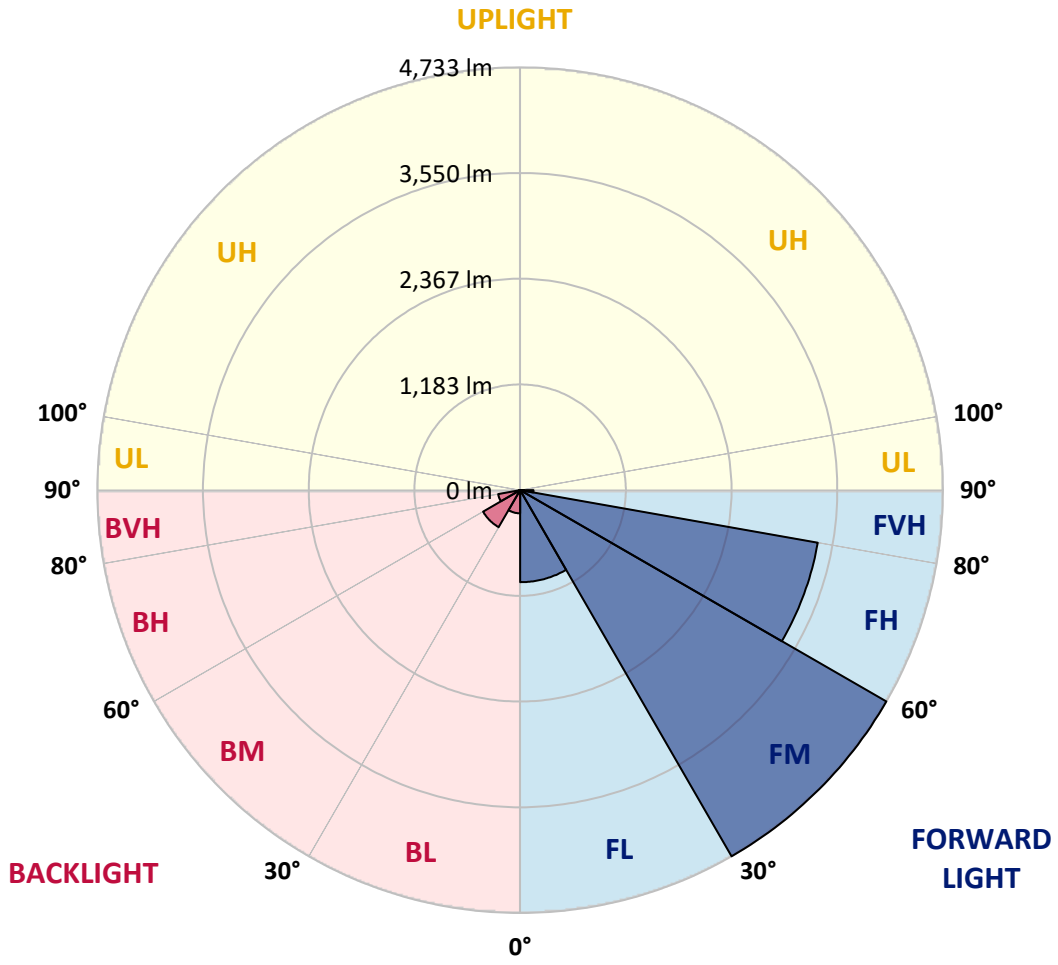
Scaled Data Report

REPORT NUMBER: P870416
CATALOG NUMBER: MEM2-HSN-SA-130-830-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1030.5	10.0			
FM	(30°-60°)	4733.4	46.0			
FH	(60°-80°)	3383.3	32.9			G2/5000
FVH	(80°-90°)	149.4	1.5			G2/225
BL	(0°-30°)	259.4	2.5	B1/500		
BM	(30°-60°)	479.4	4.7	B1/1000		
BH	(60°-80°)	249.6	2.4	B1/500		G1/500
BVH	(80°-90°)	14.0	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type III Short



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

Scaled Data Report

REPORT NUMBER: P870416
CATALOG NUMBER: MEM2-HSN-SA-130-830-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	*1272.6*	1272.6	1272.6
2.5°	1487.2	1475.4	1484.2	1463.7	1440.1	1422.5	1387.2	1357.9	*1354.9*	1325.5	1293.2
5°	1772.3	1734.1	1737.0	1695.8	1645.9	1593.0	1537.1	1463.7	*1463.7*	1393.1	1319.6
7.5°	2028.0	2022.1	1995.6	1931.0	1872.2	1789.9	1687.0	1593.0	*1572.4*	1463.7	1349.0
10°	2274.8	2266.0	2242.5	2192.5	2092.6	2001.5	1872.2	1731.1	*1704.7*	1548.9	1384.3
12.5°	2471.8	2474.7	2448.2	2407.1	2318.9	2210.2	2039.7	1863.4	*1839.9*	1631.2	1419.6
15°	2645.2	2642.2	2636.3	2601.1	2515.8	2415.9	2216.1	2010.3	*1972.1*	1719.4	1454.8
17.5°	2777.4	2771.5	2759.8	2730.4	2689.3	2592.3	2401.2	2166.1	*2133.8*	1822.2	1496.0
20°	2815.6	2812.7	2812.7	2833.3	2815.6	2756.9	2586.4	2327.7	*2292.5*	1931.0	1551.8
22.5°	2886.2	2883.2	2880.3	2900.9	2912.6	2906.7	2759.8	2492.3	*2460.0*	2057.4	1622.4
25°	2977.3	2971.4	2962.6	2983.2	2997.9	3033.1	2933.2	2686.3	*2648.1*	2204.3	1692.9
27.5°	3097.8	3103.7	3091.9	3089.0	3089.0	3109.5	3086.0	2859.7	*2824.4*	2345.4	1775.2
30°	3256.5	3265.3	3244.7	3230.0	3203.6	3200.7	3206.5	3053.7	*3003.7*	2498.2	1860.4
32.5°	3412.3	3421.1	3409.3	3388.8	3321.2	3294.7	3318.2	3218.3	*3186.0*	2665.7	1969.2
35°	3538.6	3559.2	3559.2	3518.1	3424.0	3409.3	3447.5	3379.9	*3356.4*	2862.7	2098.5
37.5°	3709.1	3720.9	3709.1	3632.7	3515.1	3532.8	3591.5	3550.4	*3535.7*	3074.3	2251.3
40°	4073.6	4088.3	4011.8	3829.6	3641.5	3662.1	3765.0	3741.4	*3717.9*	3282.9	2392.4
42.5°	4582.0	4546.7	4532.1	4126.5	3835.5	3823.7	3953.1	3920.7	*3917.8*	3494.6	2521.7
45°	4917.1	4928.8	4855.3	4470.3	4244.0	4023.6	4161.7	4150.0	*4126.5*	3709.1	2677.5
47.5°	5149.3	5122.8	4940.6	4755.4	4799.5	4285.2	4393.9	4423.3	*4408.6*	3953.1	2868.5
50°	5246.2	5219.8	5099.3	4975.9	5028.8	4585.0	4632.0	4729.0	*4714.3*	4199.9	3030.2
52.5°	5125.7	5093.4	5102.2	5134.6	5108.1	4820.1	4925.9	5078.7	*5061.1*	4488.0	3218.3
55°	4358.6	4443.9	4773.1	5102.2	5093.4	4999.4	5240.4	5463.7	*5428.5*	4787.8	3379.9
57.5°	3515.1	3562.2	3979.5	4870.0	5046.4	5149.3	5598.9	5875.2	*5863.5*	5087.5	3526.9
60°	2795.1	2845.0	3162.4	4388.0	4937.6	5305.0	5966.3	6330.8	*6319.0*	5390.3	3632.7
62.5°	2221.9	2221.9	2504.1	3694.4	4729.0	5396.1	6257.3	6789.3	*6768.7*	5634.2	3659.1
65°	1598.9	1619.4	1831.0	2971.4	4391.0	5372.6	6398.4	7115.5	*7103.7*	5772.3	3603.3
67.5°	*1181.5*	*1205.0*	*1346.1*	*2227.8*	*3891.3*	*5137.5*	*6269.0*	*7189.0*	*7194.9*	*5775.3*	*3421.1*
70°	922.9	928.7	1034.6	1548.9	3188.9	4614.3	5784.1	6945.0	*6945.0*	5631.3	3150.7
72.5°	702.4	708.3	799.4	1055.1	2348.3	3814.9	5058.1	6298.4	*6342.5*	5249.2	2751.0
75°	543.7	555.5	617.2	758.3	1472.5	2712.8	4155.8	5158.1	*5278.6*	4508.5	2266.0
77.5°	420.3	432.0	482.0	555.5	858.2	1672.3	2921.4	3856.1	*3964.8*	3550.4	1748.7
80°	338.0	343.9	376.2	417.3	520.2	861.1	1784.0	2533.5	*2565.8*	2413.0	1158.0
82.5°	155.8	167.5	202.8	229.2	258.6	399.7	761.2	937.6	*978.7*	958.1	476.1
85°	17.6	17.6	20.6	23.5	26.5	41.1	52.9	47.0	*47.0*	55.8	50.0
87.5°	0.0	0.0	0.0	2.9	5.9	5.9	8.8	8.8	*8.8*	8.8	8.8
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: P870416
CATALOG NUMBER: MEM2-HSN-SA-130-830-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6
2.5°	1275.6	1255.0	1216.8	1184.4	1155.1	1125.7	1111.0	1075.7	1066.9	1072.8	1052.2
5°	1281.4	1240.3	1160.9	1087.5	1025.7	967.0	917.0	864.1	852.3	834.7	825.9
7.5°	1290.3	1228.5	1105.1	990.5	896.4	811.2	749.5	708.3	676.0	667.2	664.2
10°	1302.0	1213.8	1043.4	899.4	770.0	681.9	626.0	596.6	584.9	576.1	579.0
12.5°	1310.8	1199.1	984.6	796.5	670.1	590.8	564.3	540.8	534.9	532.0	532.0
15°	1322.6	1184.4	914.1	705.4	584.9	537.9	511.4	502.6	502.6	499.6	499.6
17.5°	1337.3	1172.7	855.3	634.8	534.9	490.8	479.1	467.3	467.3	467.3	464.4
20°	1366.7	1166.8	802.4	576.1	490.8	461.4	443.8	435.0	432.0	429.1	429.1
22.5°	1396.1	1166.8	743.6	532.0	461.4	429.1	411.5	402.7	399.7	399.7	399.7
25°	1437.2	1163.9	696.6	493.8	435.0	396.8	379.1	370.3	364.4	364.4	361.5
27.5°	1484.2	1163.9	655.4	464.4	405.6	367.4	346.8	338.0	329.2	329.2	326.2
30°	1531.3	1169.8	620.1	440.9	376.2	340.9	314.5	302.7	296.8	293.9	293.9
32.5°	1593.0	1187.4	596.6	423.2	349.7	314.5	288.0	276.3	270.4	267.5	267.5
35°	1687.0	1231.5	599.6	414.4	332.1	291.0	264.5	249.8	246.9	246.9	243.9
37.5°	1787.0	1272.6	608.4	408.5	314.5	273.3	246.9	232.2	229.2	229.2	229.2
40°	1872.2	1307.9	620.1	405.6	299.8	255.7	232.2	220.4	214.6	214.6	214.6
42.5°	1957.4	1328.5	623.1	396.8	291.0	241.0	220.4	208.7	202.8	205.7	205.7
45°	2042.7	1343.2	614.3	385.0	282.2	229.2	208.7	196.9	191.0	191.0	191.0
47.5°	2145.5	1375.5	599.6	367.4	276.3	220.4	196.9	185.2	182.2	182.2	182.2
50°	2248.4	1401.9	587.8	346.8	261.6	208.7	188.1	173.4	170.5	170.5	170.5
52.5°	2333.6	1413.7	573.1	320.4	246.9	196.9	176.3	161.6	155.8	155.8	155.8
55°	2398.3	1416.6	552.5	299.8	226.3	185.2	164.6	149.9	144.0	141.1	141.1
57.5°	2451.2	1413.7	532.0	279.2	208.7	170.5	149.9	138.1	129.3	126.4	126.4
60°	2480.6	1404.9	502.6	252.8	185.2	155.8	138.1	123.4	117.6	114.6	114.6
62.5°	2462.9	1381.4	461.4	211.6	167.5	141.1	126.4	114.6	105.8	102.9	102.9
65°	2380.6	1334.3	408.5	173.4	149.9	126.4	114.6	102.9	91.1	88.2	88.2
67.5°	*2236.6*	*1255.0*	*338.0*	*147.0*	*138.1*	*114.6*	*102.9*	*91.1*	*82.3*	*76.4*	*76.4*
70°	2036.8	1149.2	264.5	126.4	123.4	105.8	94.1	82.3	73.5	67.6	67.6
72.5°	1751.7	975.8	196.9	108.7	108.7	97.0	85.2	76.4	67.6	61.7	61.7
75°	1416.6	737.7	149.9	99.9	97.0	88.2	76.4	67.6	61.7	55.8	55.8
77.5°	1034.6	490.8	123.4	91.1	91.1	79.4	70.5	61.7	55.8	52.9	52.9
80°	629.0	282.2	88.2	70.5	70.5	67.6	58.8	52.9	50.0	44.1	41.1
82.5°	255.7	108.7	47.0	35.3	35.3	32.3	20.6	17.6	17.6	17.6	14.7
85°	26.5	17.6	11.8	8.8	8.8	8.8	5.9	5.9	5.9	5.9	5.9
87.5°	8.8	8.8	5.9	5.9	5.9	5.9	2.9	2.9	2.9	2.9	2.9
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: SP1-2407-157-7

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-830-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-830-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

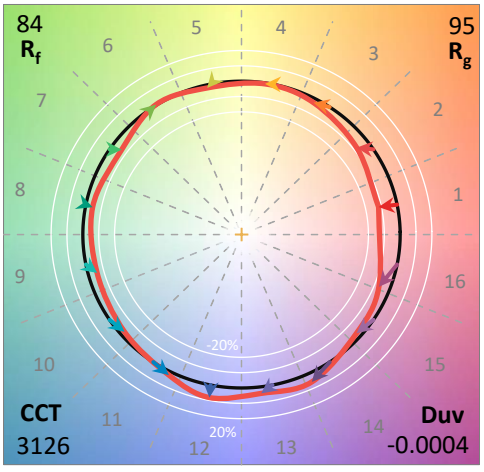
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-157-7
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-40-830-U-5WQ**
Description:	Epic Modern Light Square 40W 5WQ Optic

Spectral Parameters

CCT (K):	3126
CIE u':	0.2465
CIE v':	0.5182
Duv:	-0.0004
CIE x:	0.4277
CIE y:	0.3997
CIE z:	0.1727
Peak Wavelength (nm):	601
Dominant Wavelength (nm):	582
Purity:	48.31913
Rf:	84.4
Rg:	94.7

CRI (Ra):	82.6
R1:	81.4
R2:	92.2
R3:	94.9
R4:	80.1
R5:	81.8
R6:	90.5
R7:	81.8
R8:	58.0
R9:	5.1
R10:	82.2
R11:	79.8
R12:	70.4
R13:	84.2
R14:	97.9
R15:	73.6



Test Conditions

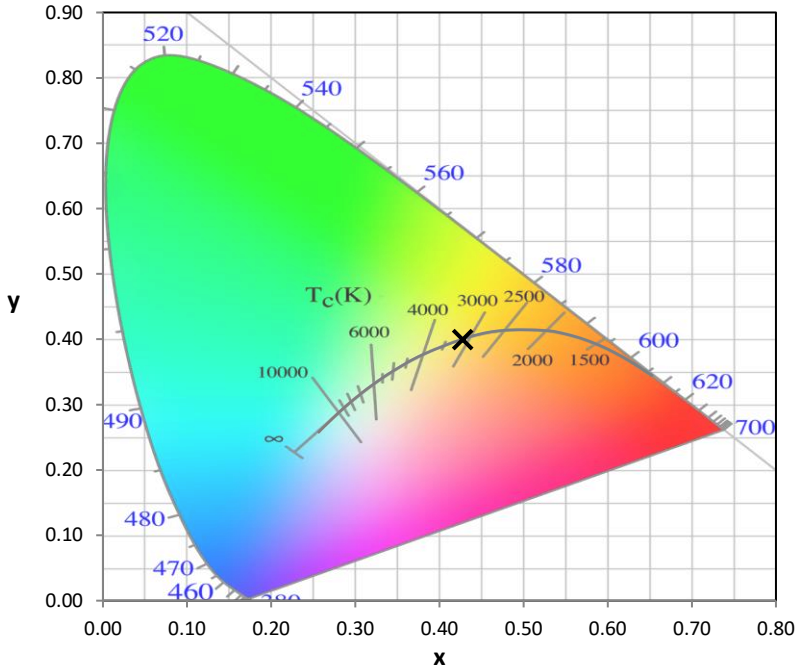
Stabilization Time:	22M
Operation Time:	1H 22M
Sphere Temperature (°C):	24.3

REPORT NUMBER: SP1-2407-157-7

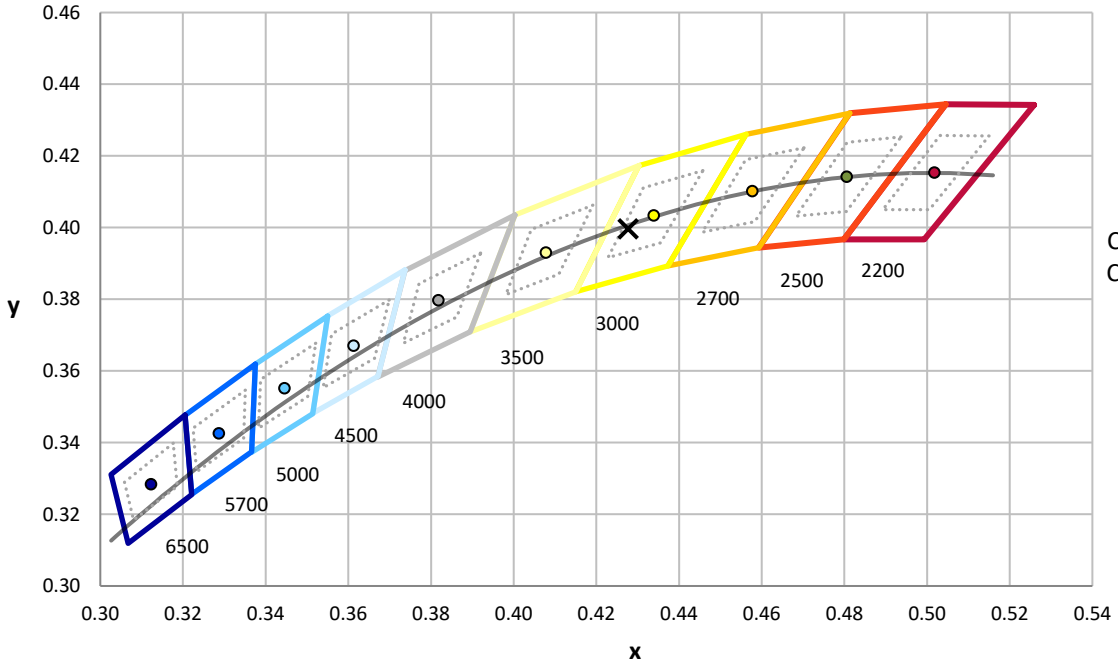
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-157-7

CIE 1931 Chromaticity Diagram



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

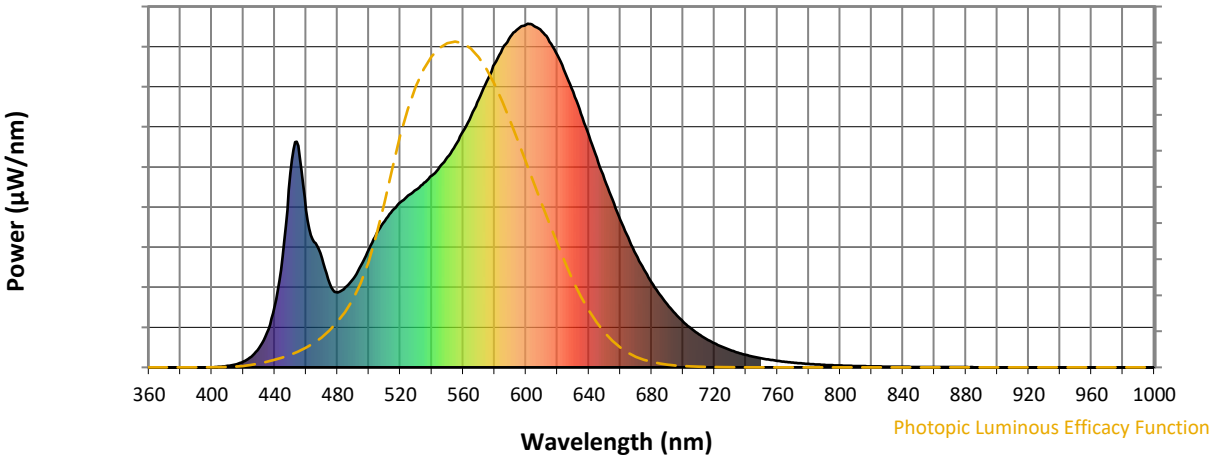


CCT = 3126K
CIE x = 0.4277
CIE y = 0.3997
Duv = -0.0004

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-7

Photopic Flux vs. Wavelength

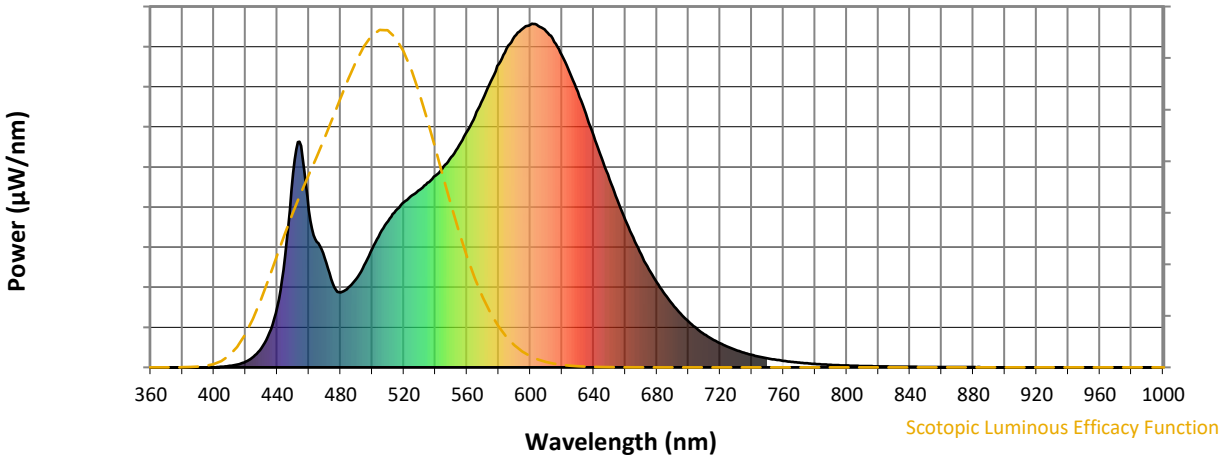


Photopic Lumens: NR

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-7

Scotopic Flux vs. Wavelength

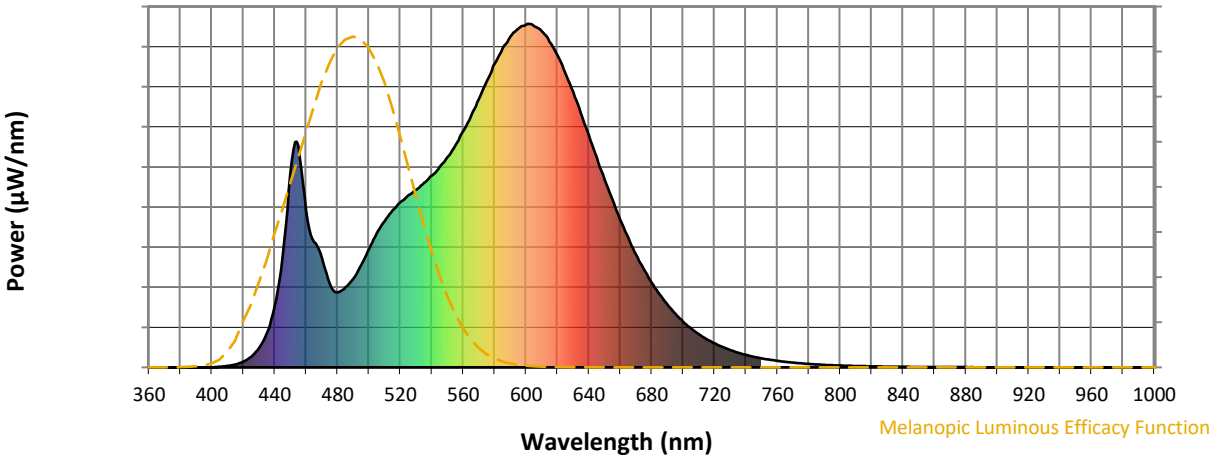


Scotopic Lumens: NR **S/P: 1.42**

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.79**

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

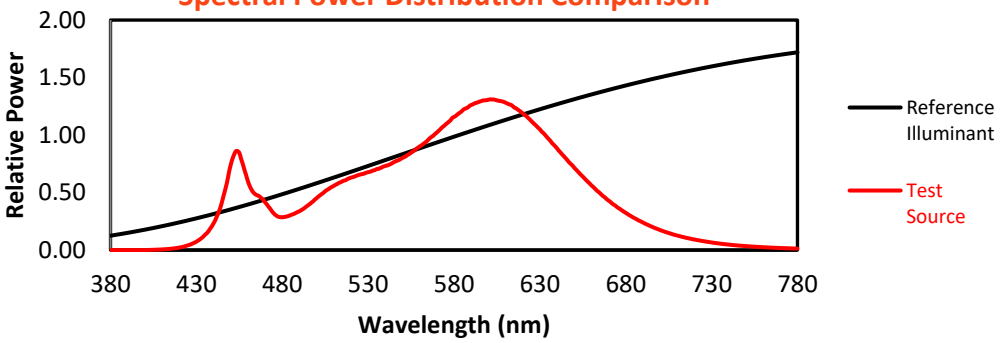
REPORT NUMBER: SP1-2407-157-7

TM-30-18

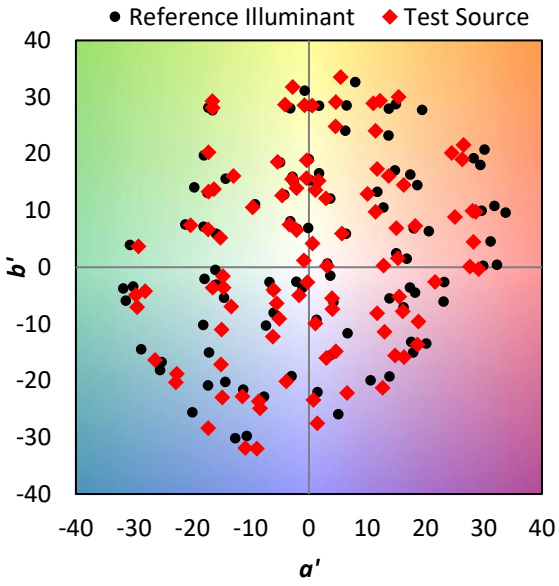
Summary

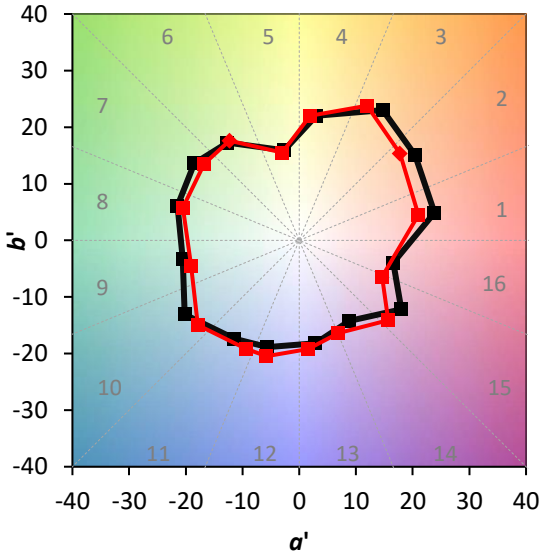
R_f = 84.4
R_g = 94.7
CIE R_a = 82.6
R_9 = 5.1

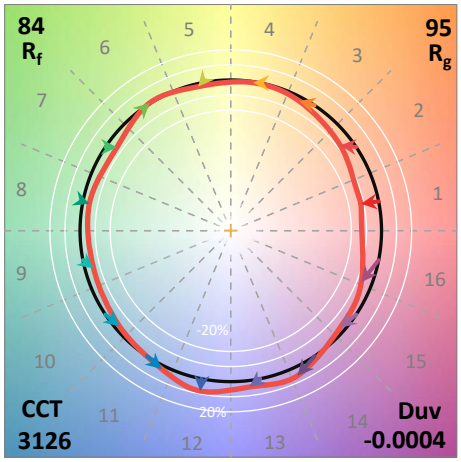
Spectral Power Distribution Comparison

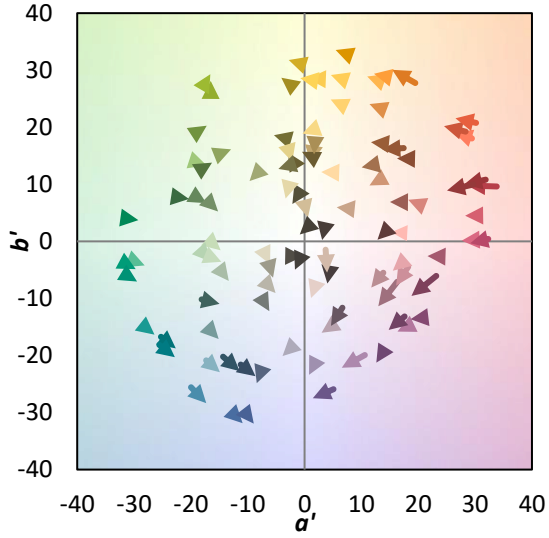


Color Vector Graphics







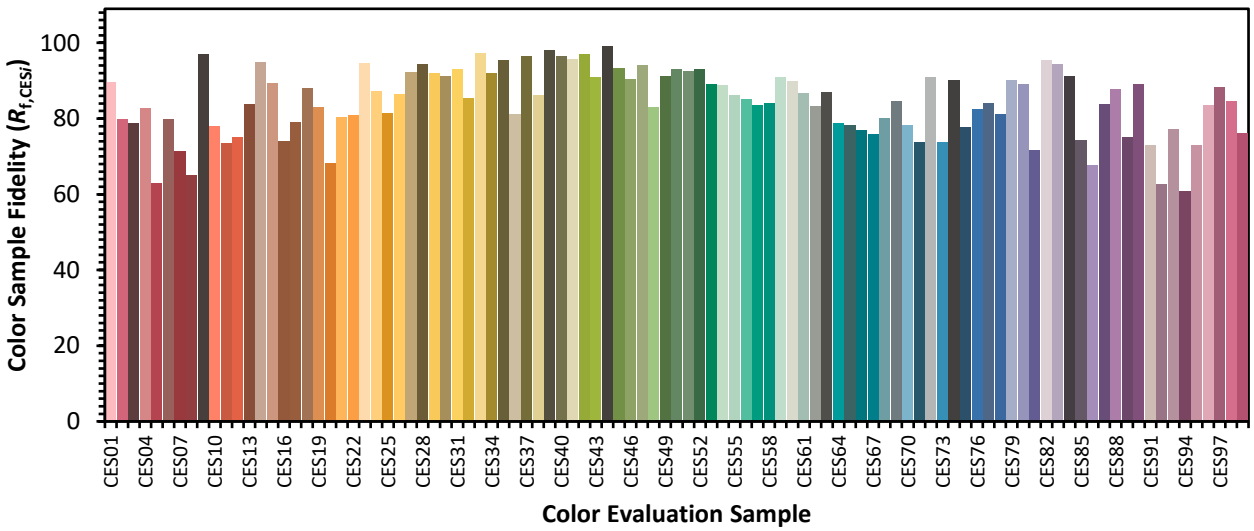


REPORT NUMBER: SP1-2407-157-7

TM-30-18

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

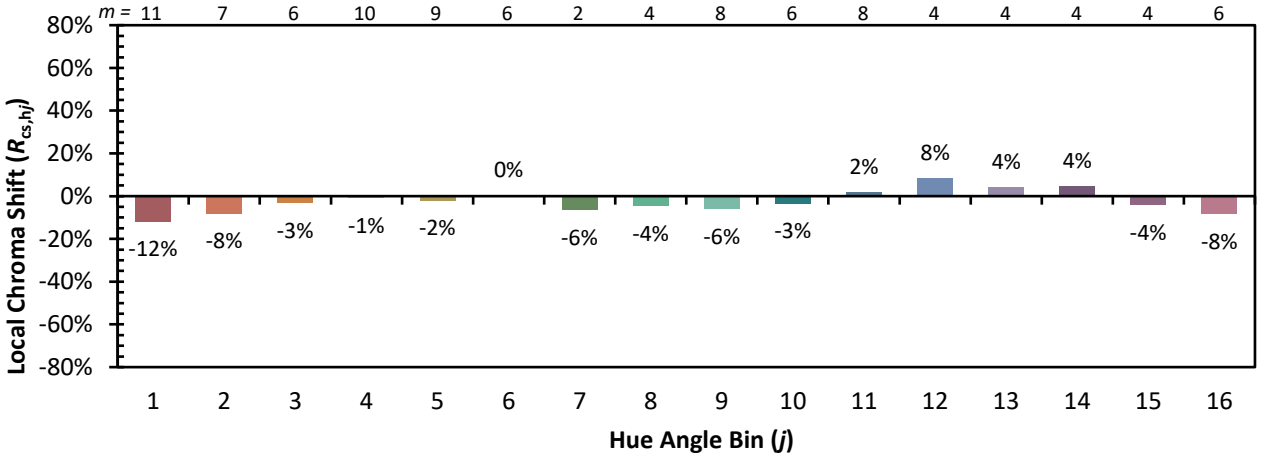
CES01 = 86	CES26 = 86	CES51 = 93	CES76 = 82
CES02 = 63	CES27 = 92	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 94	CES53 = 89	CES78 = 81
CES04 = 70	CES29 = 92	CES54 = 89	CES79 = 90
CES05 = 49	CES30 = 91	CES55 = 86	CES80 = 89
CES06 = 51	CES31 = 93	CES56 = 85	CES81 = 72
CES07 = 42	CES32 = 85	CES57 = 83	CES82 = 95
CES08 = 41	CES33 = 97	CES58 = 84	CES83 = 94
CES09 = 29	CES34 = 92	CES59 = 91	CES84 = 91
CES10 = 76	CES35 = 96	CES60 = 90	CES85 = 74
CES11 = 59	CES36 = 81	CES61 = 87	CES86 = 68
CES12 = 65	CES37 = 96	CES62 = 83	CES87 = 84
CES13 = 43	CES38 = 86	CES63 = 87	CES88 = 88
CES14 = 74	CES39 = 98	CES64 = 79	CES89 = 75
CES15 = 71	CES40 = 96	CES65 = 78	CES90 = 89
CES16 = 47	CES41 = 96	CES66 = 77	CES91 = 73
CES17 = 50	CES42 = 97	CES67 = 76	CES92 = 63
CES18 = 56	CES43 = 91	CES68 = 80	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 85	CES94 = 61
CES20 = 66	CES45 = 93	CES70 = 78	CES95 = 73
CES21 = 87	CES46 = 90	CES71 = 74	CES96 = 84
CES22 = 79	CES47 = 94	CES72 = 91	CES97 = 88
CES23 = 92	CES48 = 83	CES73 = 74	CES98 = 85
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 76
CES25 = 72	CES50 = 93	CES75 = 78	

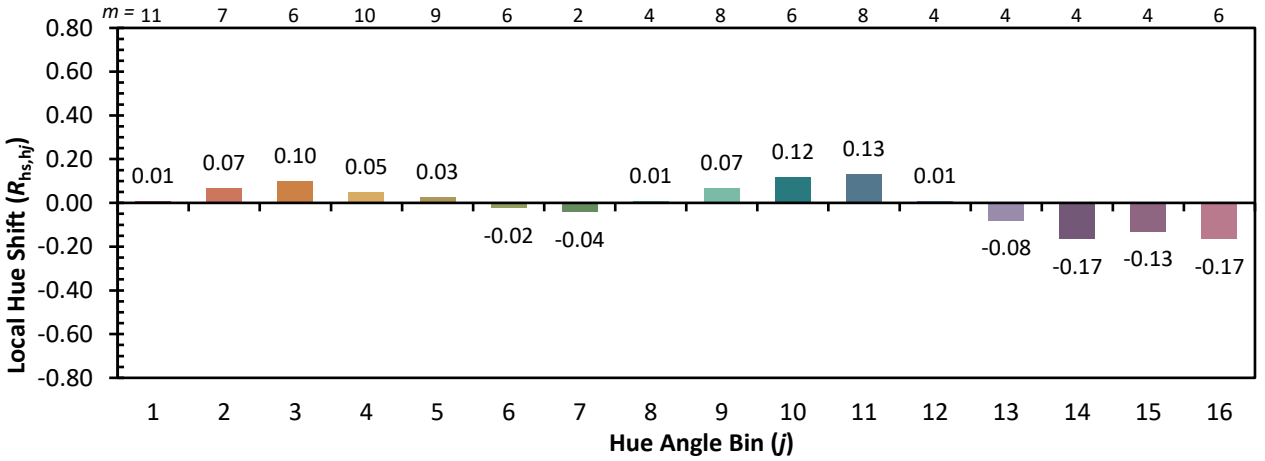


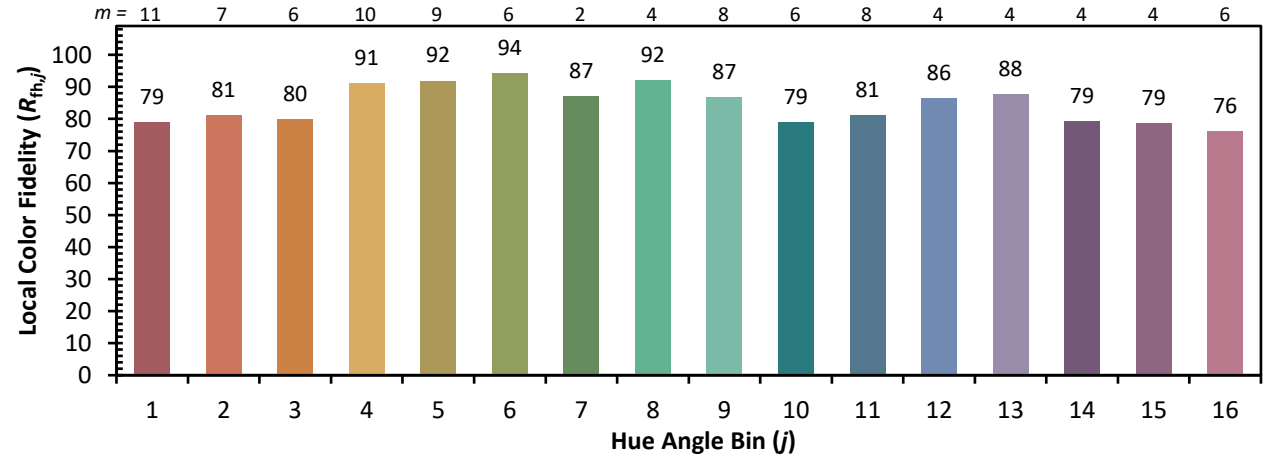
REPORT NUMBER: SP1-2407-157-7

TM-30-18

Color Rendition by Hue-Angle Bin



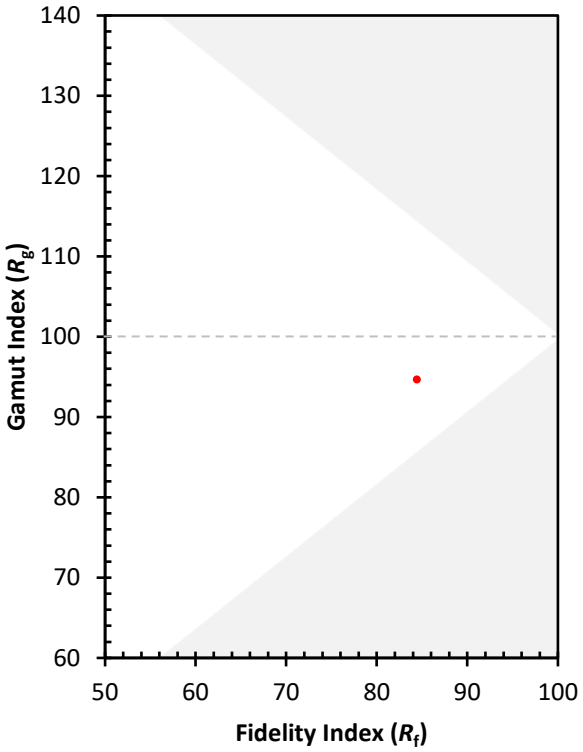


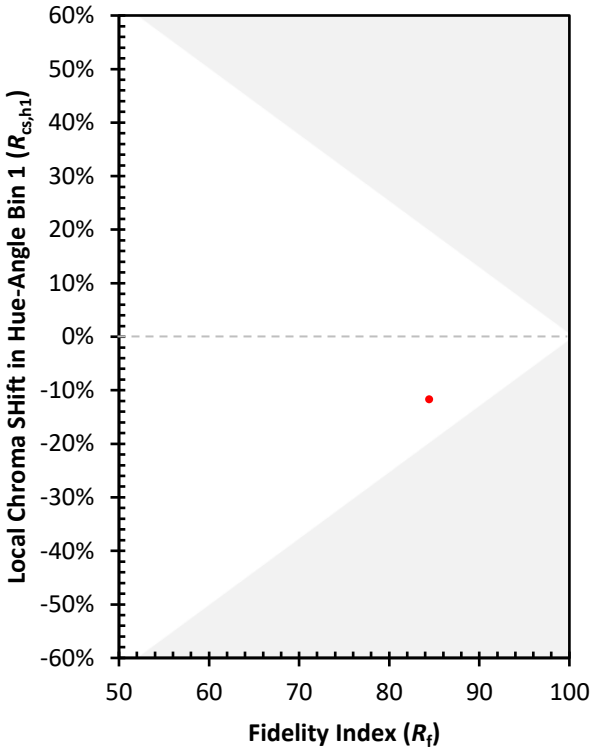


REPORT NUMBER: SP1-2407-157-7

TM-30-18

Measure Comparisons





(END OF REPORT)