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: P867998

Luminaire Tested: **MEM2-HSN-SA-90-727-U-T2U-HSS**

Issue Date: 08/21/2024

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:	P867998
Test Lab:	INNOVATION CENTER(G3)
Issue Date:	08/21/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	STREETWORKS
Catalog Number:	MEM2-HSN-SA-90-727-U-T2U-HSS
Description:	EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 90W 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:	8032.8 lumens
Efficiency:	N/A
Efficacy:	89.3 lumens/watt
Luminous Opening:	Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

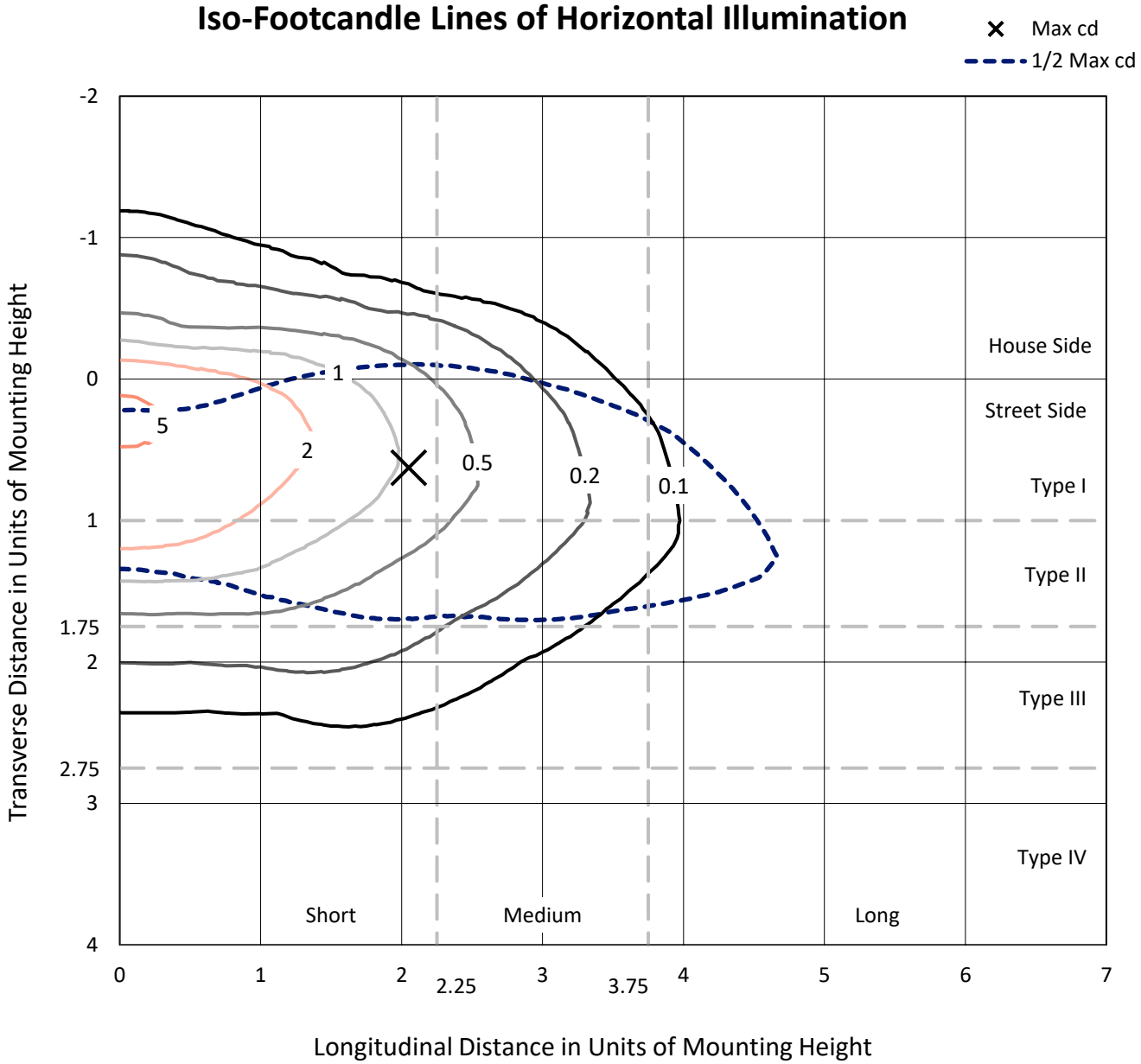
Input Watts (W):	90
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.99
Total Harmonic Distortion (THDi):	6.20%
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P867998
CATALOG NUMBER: MEM2-HSN-SA-90-727-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination



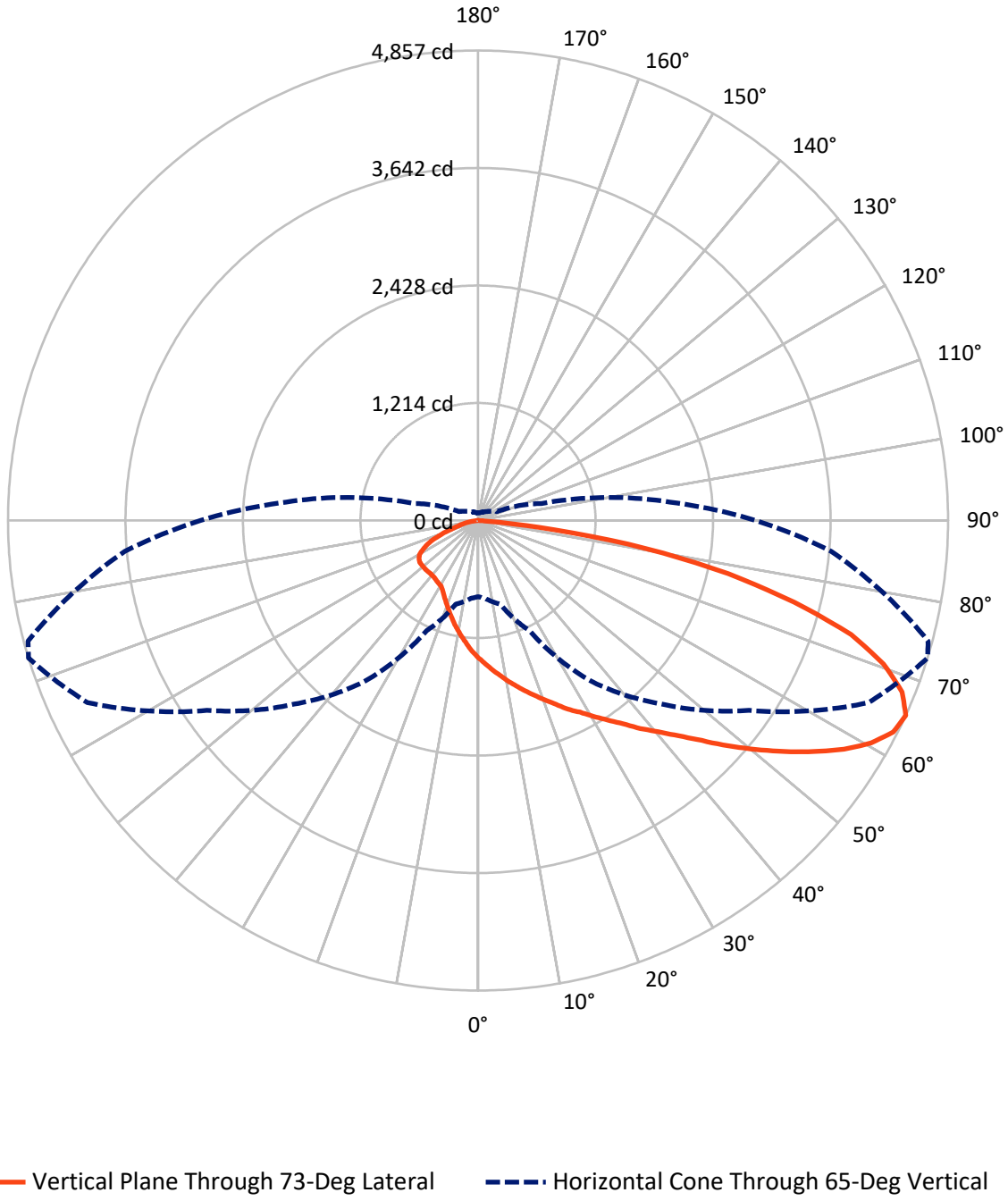
Based on 20 foot mounting height. Maximum calculated value = 5.8 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P867998
CATALOG NUMBER: MEM2-HSN-SA-90-727-U-T2U-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

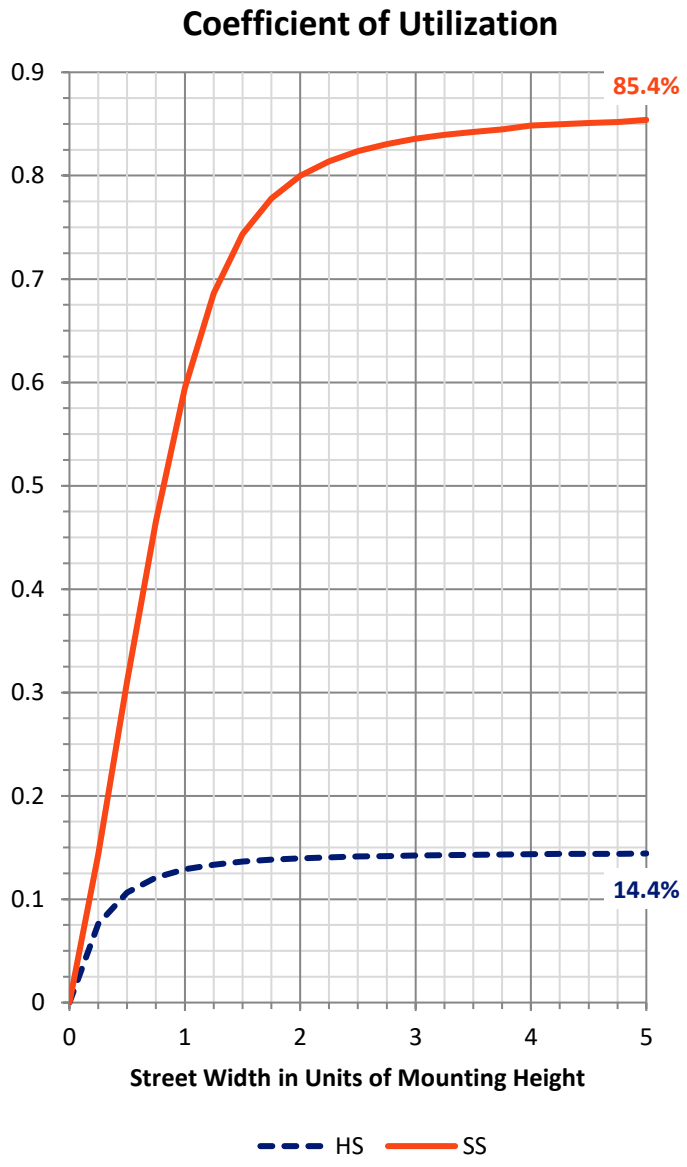
REPORT NUMBER: P867998
CATALOG NUMBER: MEM2-HSN-SA-90-727-U-T2U-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1168.1	0.0	1168.1
	% Fixture	14.5	0.0	14.5
Street Side	Lumens	6864.7	0.0	6864.7
	% Fixture	85.5	0.0	85.5
Total	Lumens	8032.8	0.0	8032.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.5	1.7
10°-20°	418.0	5.2
20°-30°	700.1	8.7
30°-40°	1056.1	13.1
40°-50°	1492.3	18.6
50°-60°	1679.1	20.9
60°-70°	1505.7	18.7
70°-80°	915.8	11.4
80°-90°	128.2	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°	8032.8	100.0
0°-180°	8032.8	100.0



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

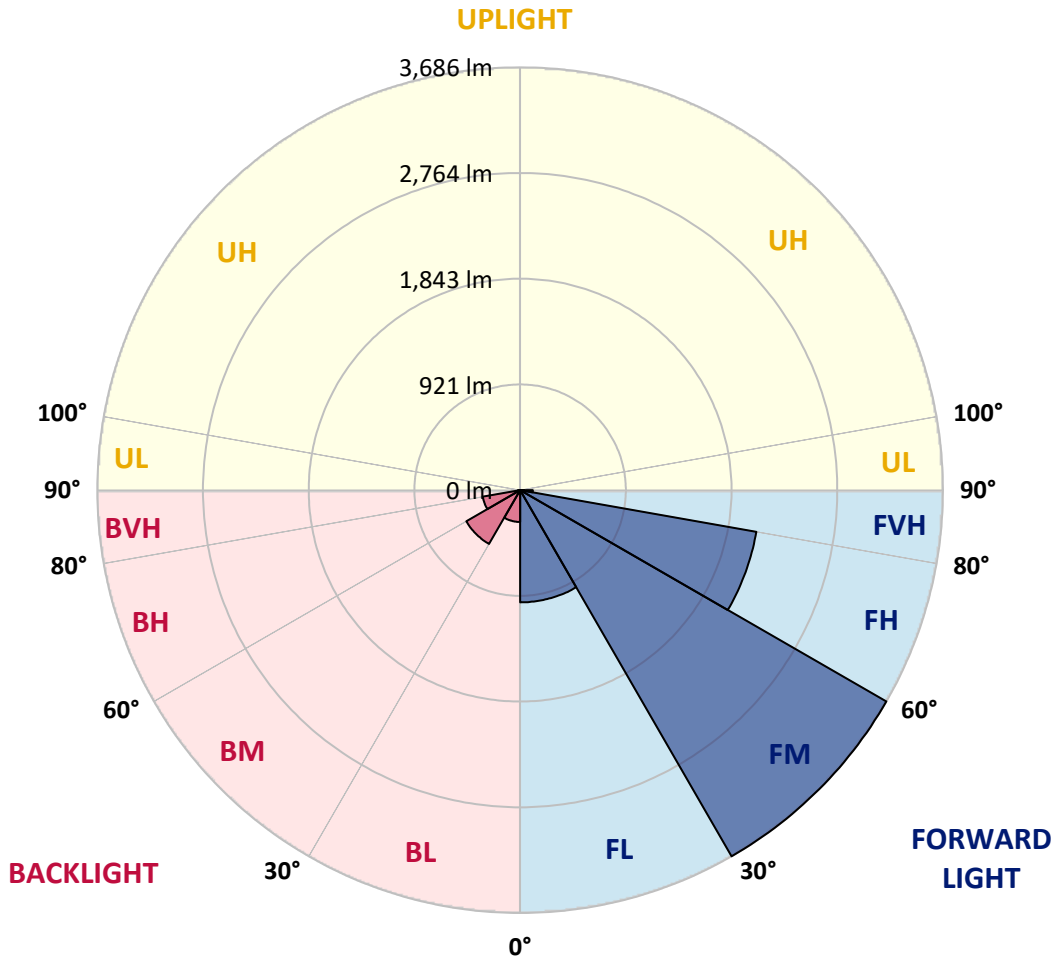
Scaled Data Report

REPORT NUMBER: P867998
CATALOG NUMBER: MEM2-HSN-SA-90-727-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	978.2	12.2			
FM	(30°-60°)	3685.8	45.9			
FH	(60°-80°)	2090.6	26.0			G2/5000
FVH	(80°-90°)	110.1	1.4			G2/225
BL	(0°-30°)	277.5	3.5	B1/500		
BM	(30°-60°)	541.6	6.7	B1/1000		
BH	(60°-80°)	330.9	4.1	B1/500		G1/500
BVH	(80°-90°)	18.1	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-G2
Type II Short



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

Scaled Data Report

REPORT NUMBER: P867998
CATALOG NUMBER: MEM2-HSN-SA-90-727-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	*1425.0*	1425.0	1425.0
2.5°	1644.8	1635.4	1621.2	1609.4	1588.1	1559.7	1536.1	1505.4	*1484.1*	1477.0	1446.3
5°	1883.5	1871.7	1855.2	1826.8	1770.1	1737.0	1675.5	1604.6	*1547.9*	1536.1	1465.2
7.5°	2129.3	2124.6	2086.7	2044.2	1975.7	1902.4	1807.9	1696.8	*1614.1*	1595.2	1486.5
10°	2337.3	2316.0	2294.7	2254.5	2181.3	2077.3	1954.4	1800.8	*1685.0*	1654.3	1507.8
12.5°	2462.5	2455.4	2436.5	2389.2	2318.3	2228.5	2082.0	1902.4	*1753.5*	1711.0	1529.0
15°	2554.7	2561.8	2542.9	2512.1	2438.9	2353.8	2212.0	2008.8	*1826.8*	1777.2	1552.7
17.5°	2642.1	2637.4	2635.0	2599.6	2533.4	2448.3	2304.2	2096.2	*1900.1*	1845.7	1576.3
20°	2691.7	2694.1	2689.4	2675.2	2611.4	2528.7	2394.0	2200.2	*1980.4*	1919.0	1607.0
22.5°	2717.7	2727.2	2736.6	2734.3	2682.3	2618.5	2479.0	2282.9	*2063.1*	1999.3	1644.8
25°	2734.3	2741.4	2762.6	2791.0	2743.7	2691.7	2573.6	2382.2	*2160.0*	2086.7	1689.7
27.5°	2748.5	2757.9	2783.9	2826.4	2788.6	2757.9	2656.3	2467.2	*2242.7*	2176.6	1741.7
30°	2840.6	2852.4	2852.4	2873.7	2831.2	2824.1	2748.5	2568.9	*2346.7*	2275.8	1807.9
32.5°	3084.0	3060.4	3017.9	2996.6	2895.0	2897.3	2838.3	2670.5	*2457.8*	2386.9	1890.6
35°	3294.4	3294.4	3242.4	3173.8	3010.8	2977.7	2942.2	2805.2	*2578.3*	2509.8	1999.3
37.5°	3497.6	3500.0	3445.6	3386.5	3199.8	3081.7	3062.8	2935.2	*2727.2*	2646.8	2112.7
40°	3625.2	3639.4	3625.2	3580.3	3400.7	3263.6	3180.9	3081.7	*2869.0*	2807.5	2242.7
42.5°	3646.5	3674.9	3726.8	3741.0	3547.2	3426.7	3332.2	3232.9	*3039.1*	2970.6	2391.6
45°	3592.1	3601.6	3717.4	3733.9	3655.9	3556.7	3492.9	3410.2	*3242.4*	3183.3	2557.0
47.5°	3443.3	3424.3	3464.5	3608.7	3639.4	3634.7	3651.2	3611.0	*3478.7*	3403.1	2739.0
50°	3124.2	3131.3	3261.3	3436.2	3542.5	3663.0	3769.4	3814.3	*3717.4*	3641.8	2935.2
52.5°	2542.9	2575.9	2824.1	3237.7	3422.0	3644.1	3854.5	4005.7	*3965.5*	3892.3	3128.9
55°	2089.1	2138.7	2386.9	2918.6	3256.6	3552.0	3904.1	4206.6	*4213.7*	4157.0	3306.2
57.5°	1635.4	1675.5	1937.9	2424.7	3020.2	3407.8	3911.2	4379.1	*4459.4*	4393.3	3462.2
60°	1280.9	1309.2	1462.9	2020.6	2729.6	3202.2	3859.2	4516.2	*4667.4*	4617.8	3596.9
62.5°	971.3	992.6	1129.6	1597.6	2372.7	2961.2	3684.3	4565.8	*4813.9*	4766.7	3672.5
65°	*787.0*	*805.9*	*895.7*	*1254.9*	*2020.6*	*2682.3*	*3419.6*	*4452.4*	*4856.5*	*4813.9*	*3663.0*
67.5°	642.8	649.9	723.2	978.4	1708.6	2368.0	3032.0	4157.0	*4726.5*	4724.1	3554.3
70°	519.9	538.8	600.3	779.9	1420.3	2006.4	2580.7	3693.8	*4445.3*	4468.9	3336.9
72.5°	441.9	446.7	501.0	645.2	1158.0	1628.3	2136.4	3159.7	*4031.7*	4050.6	2996.6
75°	373.4	380.5	420.7	522.3	940.6	1292.7	1718.1	2552.3	*3374.7*	3455.1	2523.9
77.5°	321.4	323.8	352.1	430.1	668.8	971.3	1259.6	1914.2	*2642.1*	2698.8	1982.8
80°	252.9	257.6	288.3	340.3	465.6	631.0	869.7	1309.2	*1765.3*	1829.2	1373.0
82.5°	118.2	132.3	139.4	186.7	243.4	311.9	411.2	545.9	*798.8*	796.4	640.4
85°	11.8	9.5	9.5	14.2	21.3	21.3	26.0	30.7	*61.4*	73.3	56.7
87.5°	0.0	0.0	0.0	2.4	4.7	4.7	4.7	7.1	*7.1*	7.1	7.1
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: P867998
CATALOG NUMBER: MEM2-HSN-SA-90-727-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0
2.5°	1432.1	1410.9	1373.0	1337.6	1314.0	1295.1	1264.3	1245.4	1231.3	1212.3	1210.0
5°	1427.4	1389.6	1314.0	1250.2	1188.7	1136.7	1082.4	1049.3	1013.8	997.3	1011.5
7.5°	1432.1	1370.7	1252.5	1155.6	1063.5	980.7	909.9	864.9	831.9	815.3	817.7
10°	1434.5	1354.1	1200.5	1065.8	947.7	850.8	770.4	709.0	668.8	659.3	647.5
12.5°	1429.8	1332.9	1148.5	978.4	836.6	730.2	635.7	588.4	548.3	529.4	529.4
15°	1434.5	1316.3	1094.2	898.0	737.3	614.4	534.1	482.1	458.5	441.9	444.3
17.5°	1434.5	1302.1	1042.2	820.0	640.4	527.0	453.7	411.2	387.6	378.1	375.8
20°	1451.0	1290.3	992.6	746.8	555.4	449.0	389.9	356.9	337.9	328.5	323.8
22.5°	1462.9	1280.9	947.7	675.9	484.5	392.3	342.7	311.9	297.8	293.0	293.0
25°	1484.1	1278.5	907.5	607.4	427.7	349.8	304.9	281.2	269.4	264.7	264.7
27.5°	1514.8	1283.2	869.7	548.3	385.2	307.2	274.1	255.2	248.1	245.8	243.4
30°	1559.7	1304.5	846.0	503.4	345.0	281.2	250.5	238.7	234.0	231.6	231.6
32.5°	1618.8	1342.3	836.6	479.7	321.4	260.0	234.0	224.5	219.8	219.8	217.4
35°	1692.1	1384.9	829.5	458.5	304.9	245.8	222.1	212.7	210.3	210.3	210.3
37.5°	1779.5	1429.8	817.7	444.3	295.4	234.0	212.7	203.2	203.2	203.2	203.2
40°	1876.4	1495.9	815.3	434.8	288.3	226.9	203.2	193.8	193.8	193.8	193.8
42.5°	1985.1	1566.8	813.0	427.7	283.6	222.1	193.8	184.3	184.3	184.3	184.3
45°	2117.5	1656.6	817.7	423.0	283.6	217.4	186.7	174.9	172.5	172.5	172.5
47.5°	2247.4	1741.7	822.4	418.3	278.9	210.3	177.2	165.4	163.1	160.7	160.7
50°	2386.9	1829.2	822.4	413.6	274.1	203.2	170.2	153.6	151.2	148.9	148.9
52.5°	2523.9	1902.4	824.8	406.5	262.3	191.4	158.3	144.2	139.4	137.1	134.7
55°	2656.3	1980.4	827.1	394.7	248.1	179.6	151.2	134.7	127.6	122.9	122.9
57.5°	2755.5	2044.2	815.3	371.0	229.2	167.8	139.4	122.9	113.4	108.7	108.7
60°	2850.1	2084.4	794.1	335.6	210.3	156.0	130.0	111.1	101.6	96.9	96.9
62.5°	2887.9	2091.5	744.4	274.1	186.7	144.2	118.2	101.6	94.5	92.2	92.2
65°	*2866.6*	*2060.8*	*678.3*	*217.4*	*165.4*	*130.0*	*108.7*	*94.5*	*85.1*	*78.0*	*78.0*
67.5°	2750.8	1954.4	588.4	172.5	144.2	118.2	99.3	85.1	75.6	68.5	68.5
70°	2531.0	1784.3	458.5	137.1	125.3	104.0	89.8	78.0	68.5	61.4	61.4
72.5°	2207.3	1547.9	333.2	115.8	108.7	92.2	80.4	70.9	61.4	56.7	56.7
75°	1819.7	1193.4	236.3	99.3	96.9	82.7	73.3	63.8	56.7	52.0	52.0
77.5°	1366.0	831.9	184.3	87.4	85.1	75.6	66.2	59.1	52.0	49.6	47.3
80°	909.9	515.2	139.4	66.2	63.8	59.1	54.4	49.6	42.5	37.8	37.8
82.5°	406.5	217.4	70.9	37.8	33.1	28.4	23.6	16.5	16.5	14.2	14.2
85°	42.5	28.4	14.2	9.5	9.5	7.1	7.1	7.1	4.7	4.7	4.7
87.5°	7.1	7.1	4.7	4.7	4.7	2.4	2.4	2.4	2.4	2.4	2.4
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

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

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

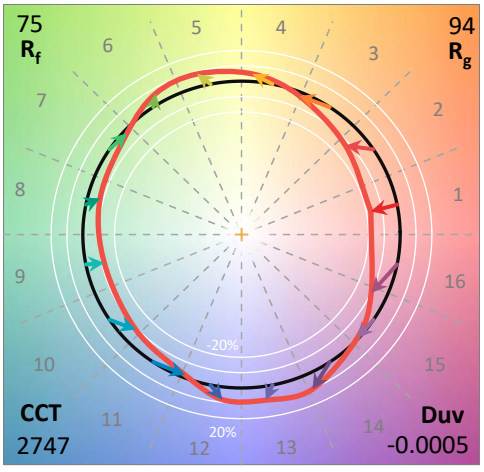
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-157-3
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
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	CRI (Ra):	71.7		
CIE u':	0.2606	R1:	68.1	R9:	-35.3
CIE v':	0.5257	R2:	83.9	R10:	64.2
Duv:	-0.0005	R3:	94.7	R11:	61.7
CIE x:	0.4552	R4:	66.3	R12:	53.9
CIE y:	0.4082	R5:	67.4	R13:	71.2
CIE z:	0.1366	R6:	78.7	R14:	97.6
Peak Wavelength (nm):	597	R7:	75.0	R15:	59.3
Dominant Wavelength (nm):	584	R8:	39.4		
Purity:	59.16856				

Rf:	75.5
Rg:	93.6



Test Conditions

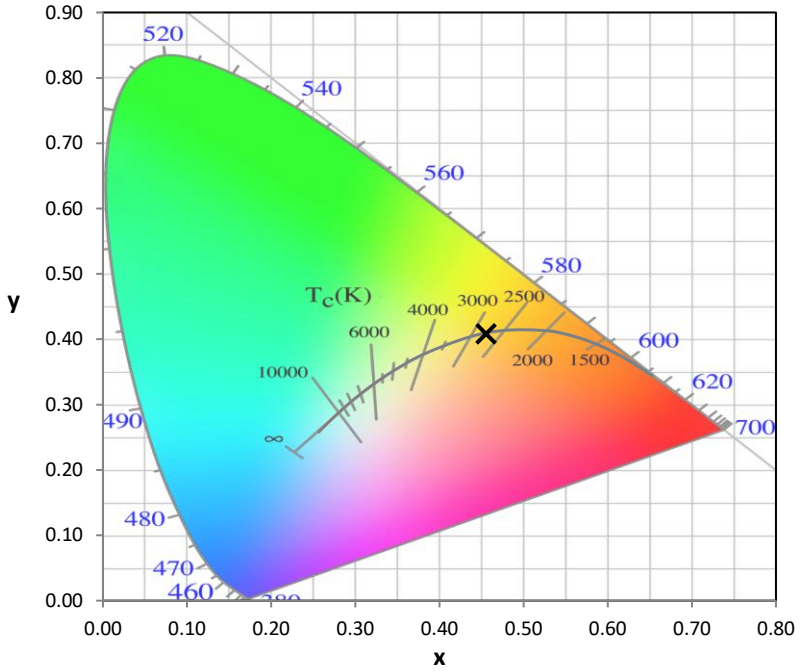
Stabilization Time:	22M
Operation Time:	1H 22M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2407-157-3

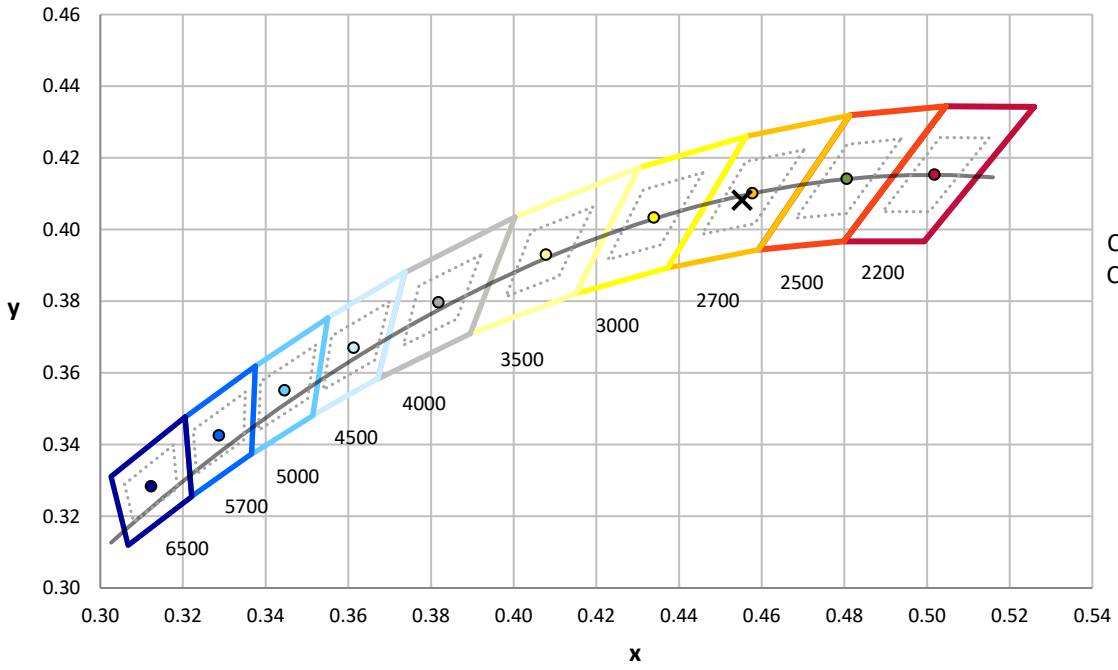
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-157-3

CIE 1931 Chromaticity Diagram



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

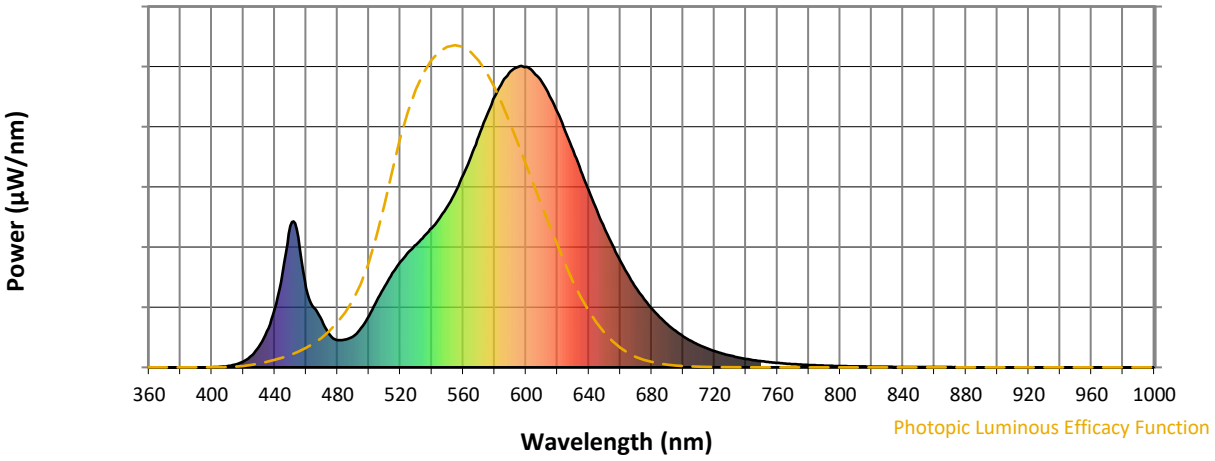


CCT = 2747K
CIE x = 0.4552
CIE y = 0.4082
Duv = -0.0005

Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-3

Photopic Flux vs. Wavelength

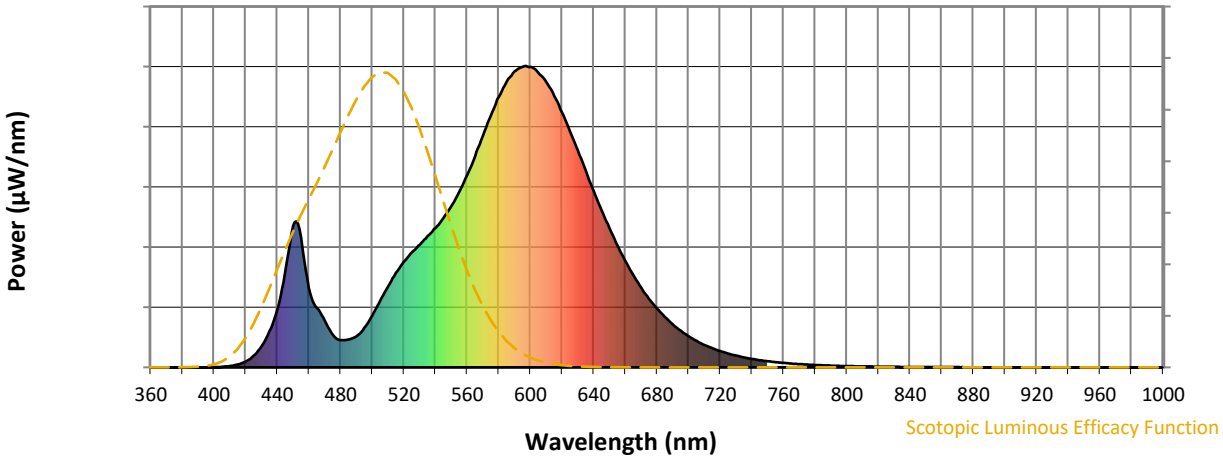


Photopic Lumens: NR

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	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

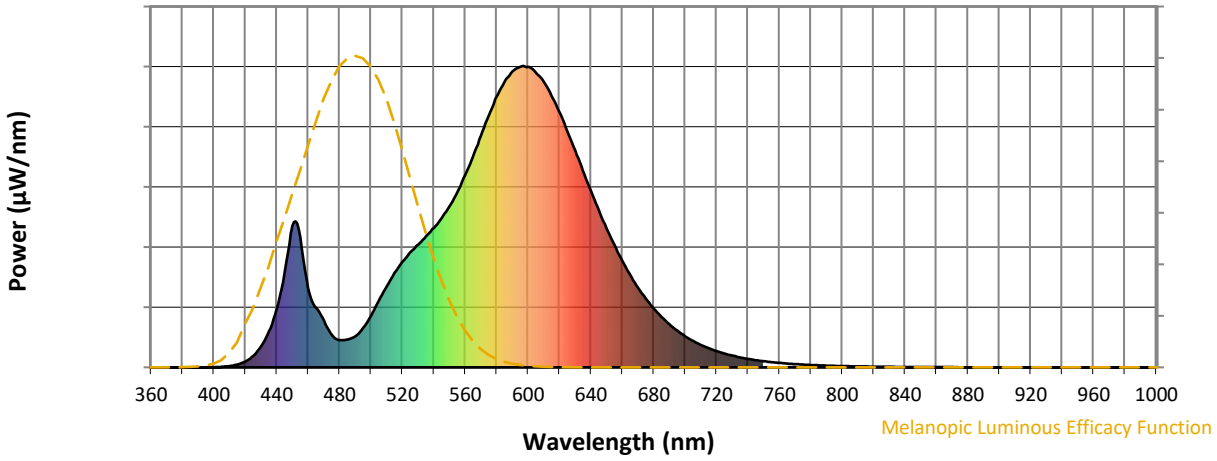


Scotopic Lumens: NR **S/P: 1.13**

λ (nm)	Power W^/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	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^/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	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			

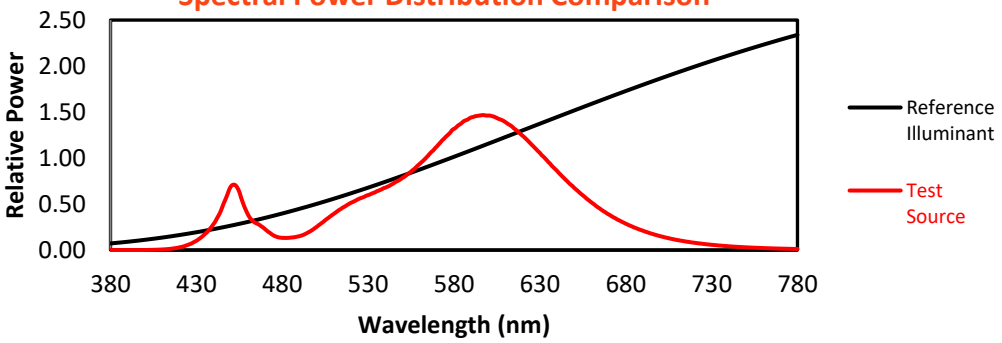
REPORT NUMBER: SP1-2407-157-3

TM-30-18

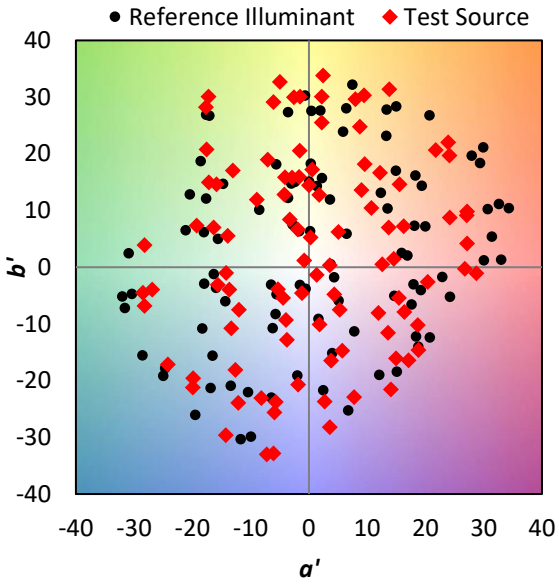
Summary

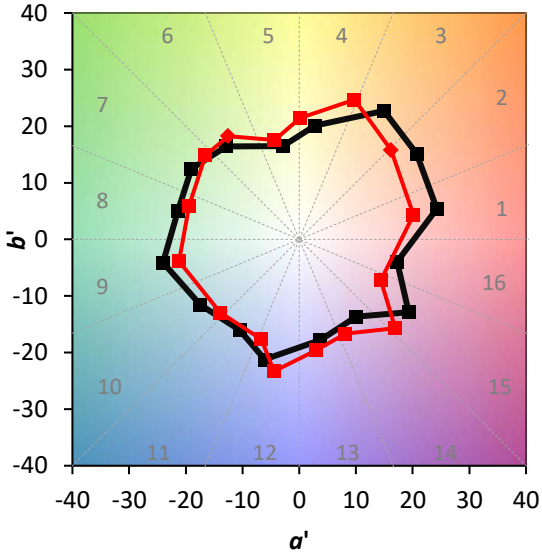
R_f = 75.5
R_g = 93.6
CIE R_a = 71.7
R_9 = -35.3

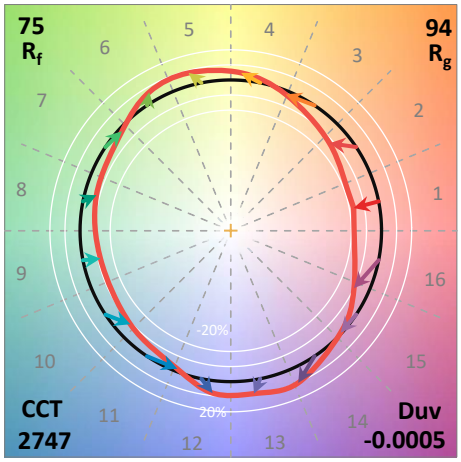
Spectral Power Distribution Comparison

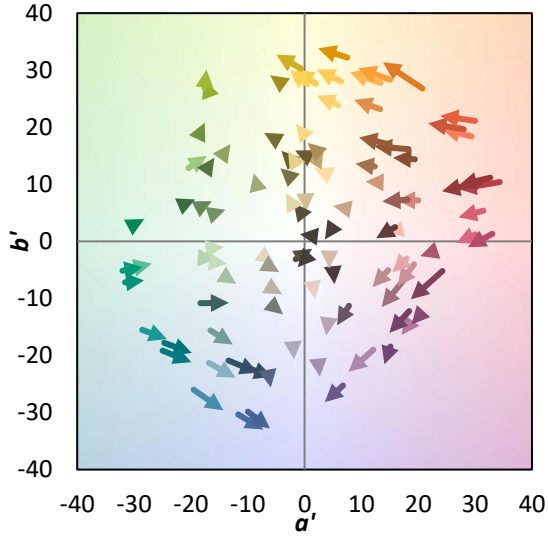


Color Vector Graphics







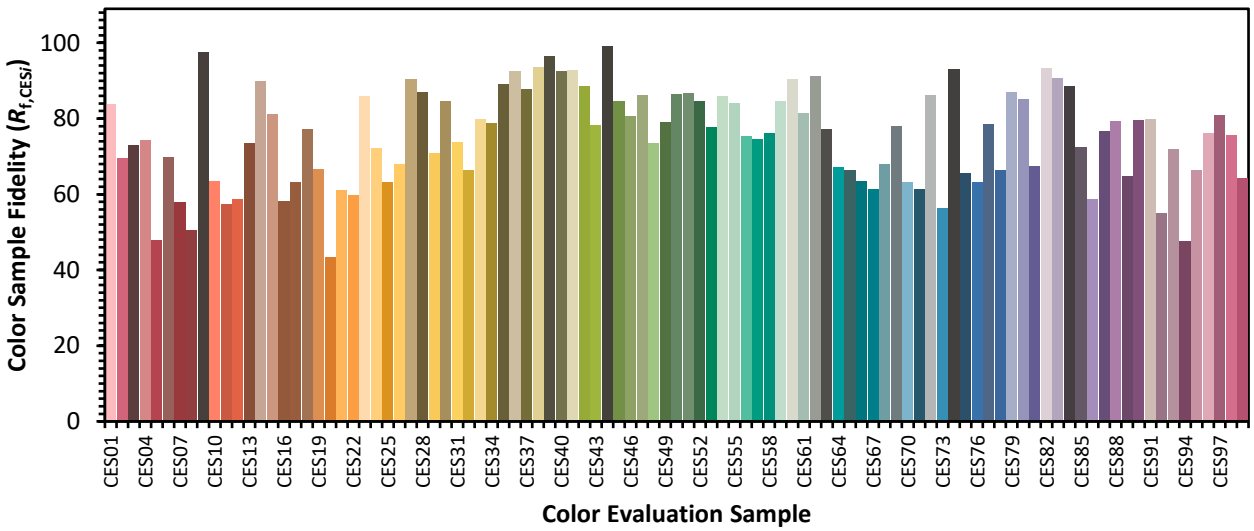


REPORT NUMBER: SP1-2407-157-3

TM-30-18

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

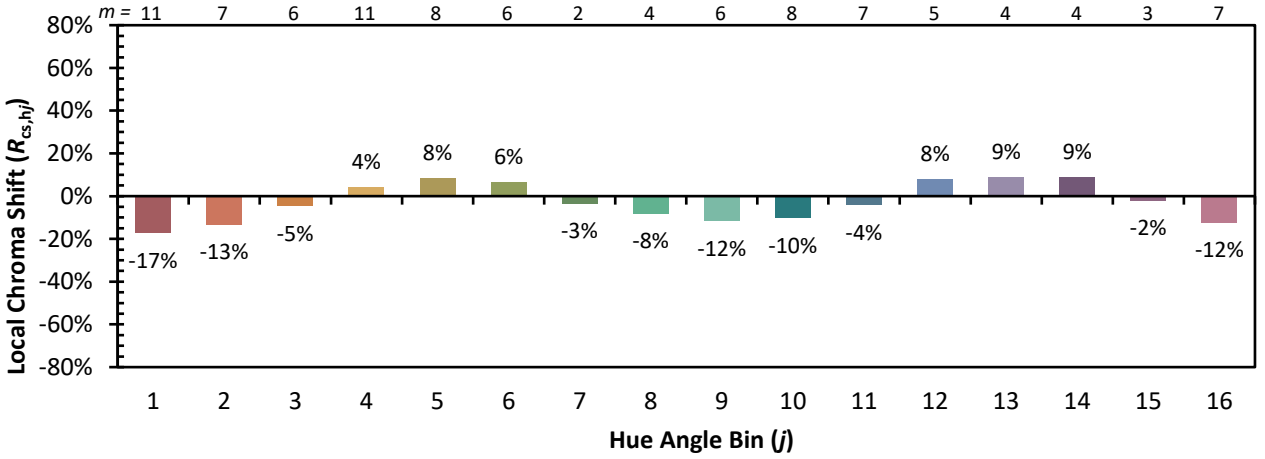
CES01 = 86	CES26 = 68	CES51 = 87	CES76 = 63
CES02 = 63	CES27 = 90	CES52 = 85	CES77 = 79
CES03 = 31	CES28 = 87	CES53 = 78	CES78 = 66
CES04 = 71	CES29 = 71	CES54 = 86	CES79 = 87
CES05 = 50	CES30 = 85	CES55 = 84	CES80 = 85
CES06 = 52	CES31 = 74	CES56 = 75	CES81 = 67
CES07 = 42	CES32 = 66	CES57 = 75	CES82 = 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	

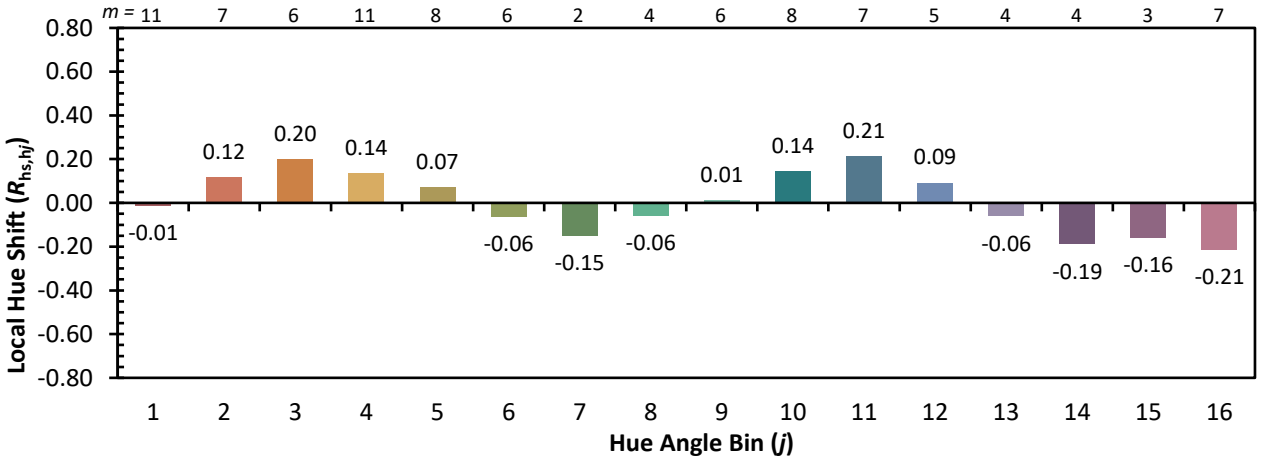


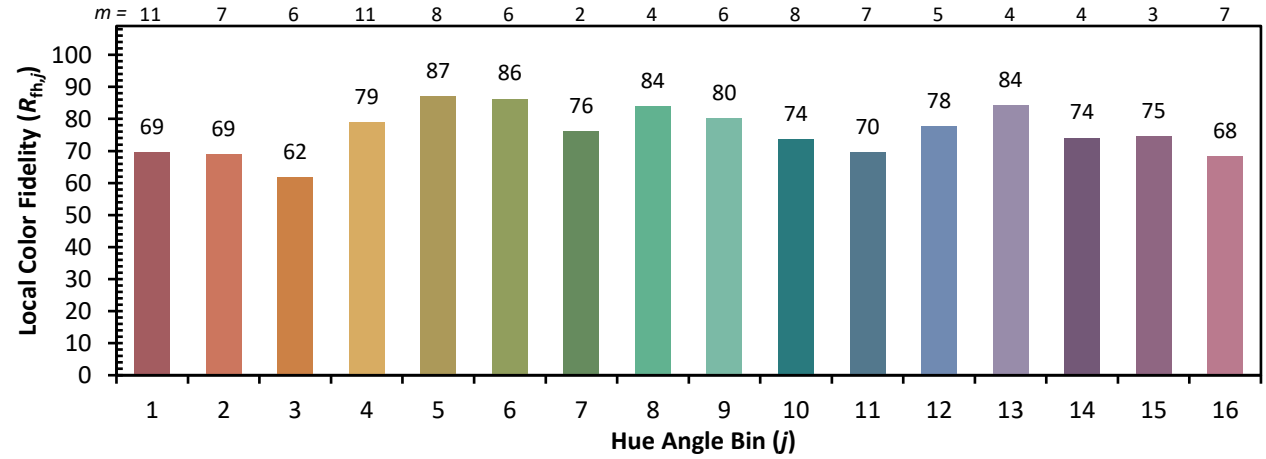
REPORT NUMBER: SP1-2407-157-3

TM-30-18

Color Rendition by Hue-Angle Bin



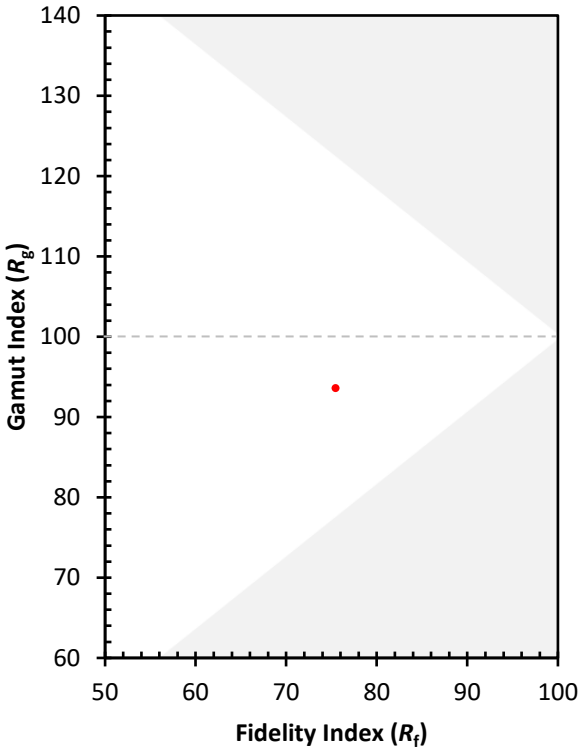


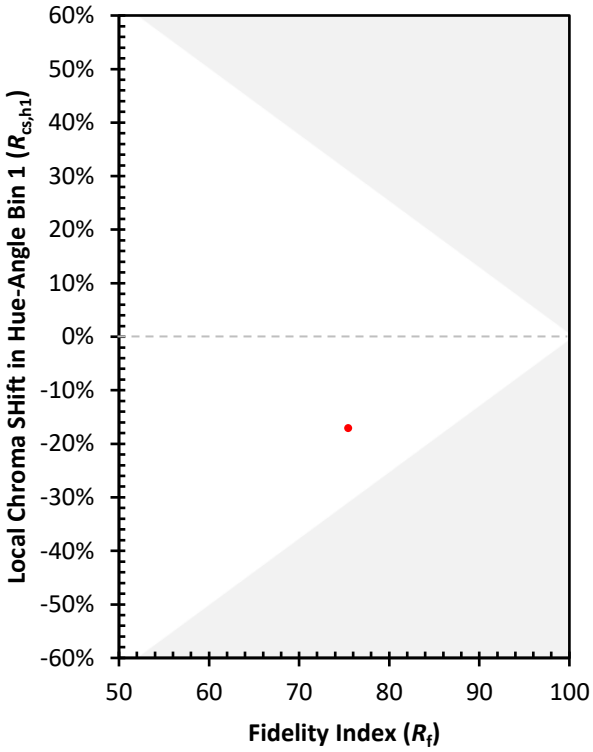


REPORT NUMBER: SP1-2407-157-3

TM-30-18

Measure Comparisons





(END OF REPORT)