

Signify Classified - Internal
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: LUMARK

Report Number: P895735

Luminaire Tested: **CLCS15S-PC-3000K-60%**

Issue Date: 11/14/2024

Test Information

Test Method: LM-79-08
Report Number: P895735
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: CLCS15S-PC-3000K-60%
Description: LUMARK SMALL LED CANOPY 8000LM, 60W, PC 80 CRI 3000K FIXTURE @ 60%
OUTPUT
Light Source: 3000K CCT,80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

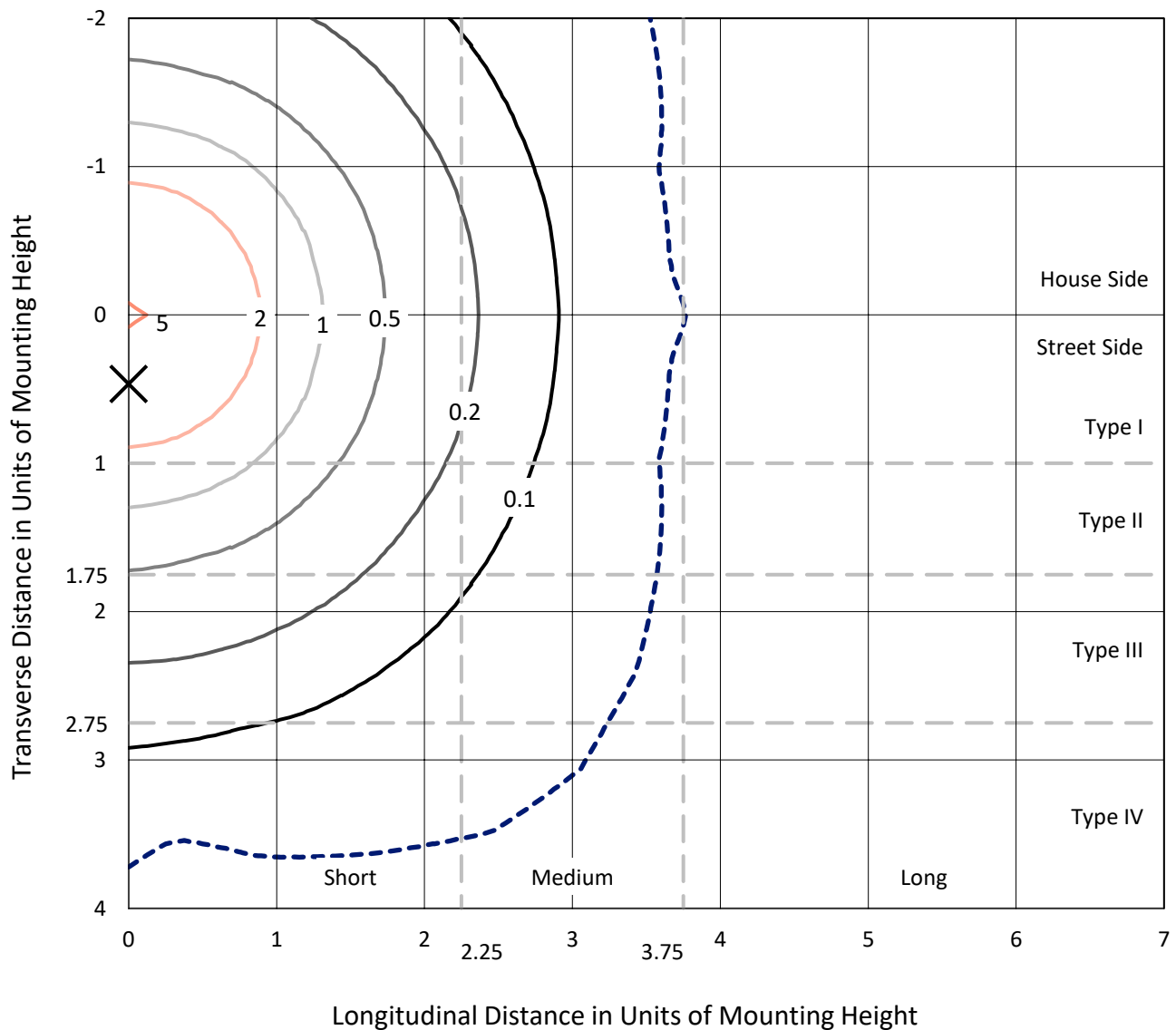
Lumens per Lamp: N/A
Luminaire Lumens: 4969.7 lumens
Efficiency: N/A
Efficacy: 136.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.8' x L: 0.8' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U3 - G1

Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.98
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

REPORT NUMBER: P895735
 CATALOG NUMBER: CLCS15S-PC-3000K-60%

Iso-Footcandle Lines of Horizontal Illumination

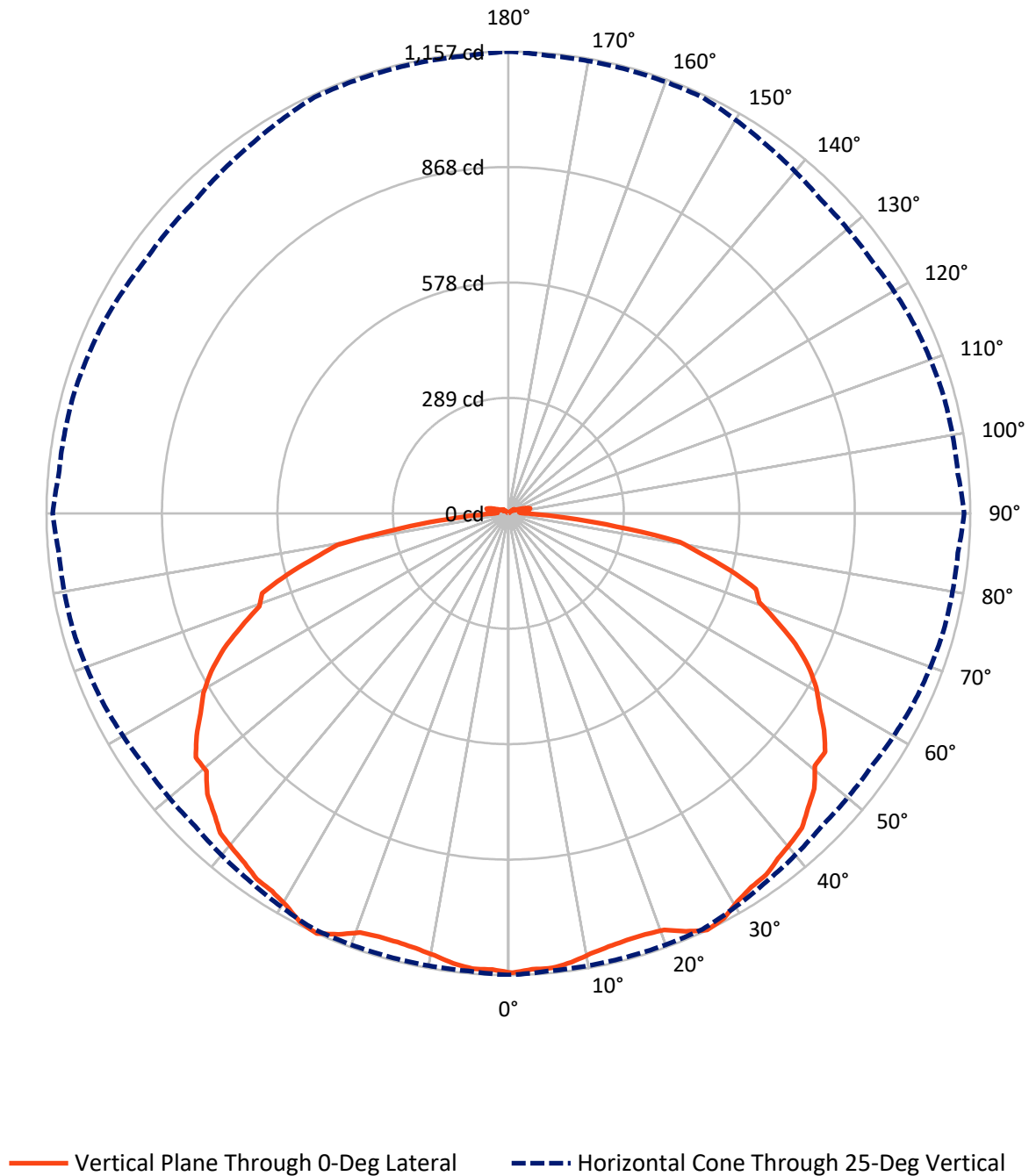
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.1 fc
 Type V - Short - N/A

REPORT NUMBER: P895735
CATALOG NUMBER: CLCS15S-PC-3000K-60%

Luminous Intensity Polar Plot



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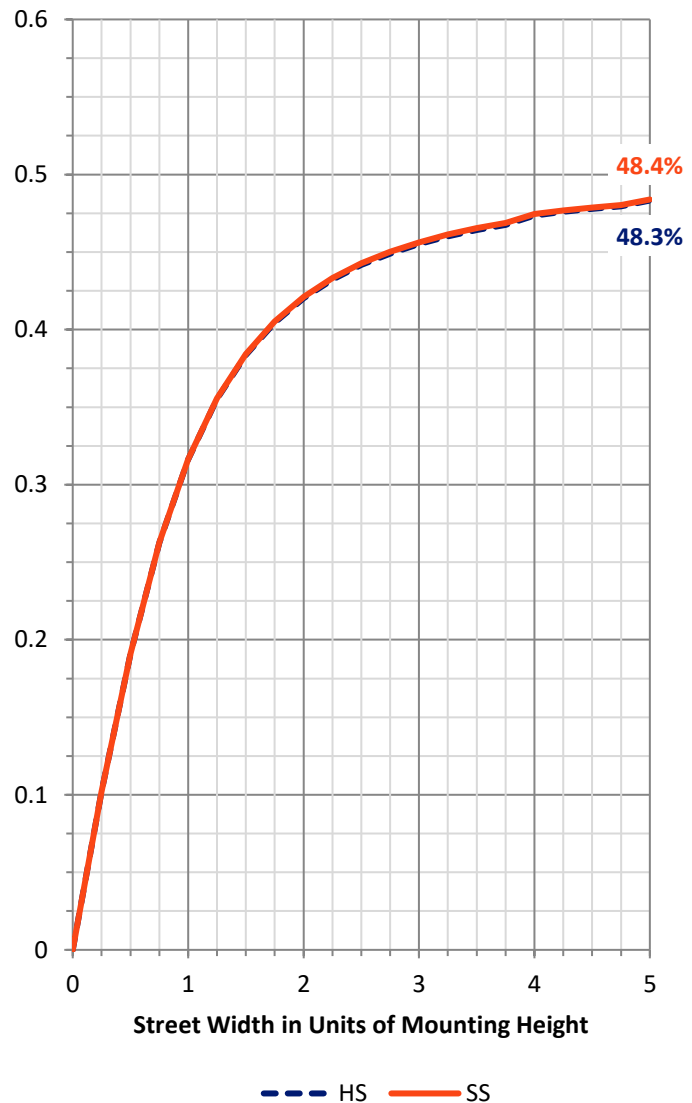
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2436.0	48.8	2484.9
	% Fixture	49.0	1.0	50.0
Street Side	Lumens	2436.0	48.8	2484.9
	% Fixture	49.0	1.0	50.0
Total	Lumens	4872.1	97.6	4969.7
	% Fixture	98.0	2.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.0	2.2
10°-20°	315.9	6.4
20°-30°	519.4	10.5
30°-40°	688.6	13.9
40°-50°	814.6	16.4
50°-60°	856.9	17.2
60°-70°	783.7	15.8
70°-80°	605.1	12.2
80°-90°	179.1	3.6
90°-100°	34.1	0.7
100°-110°	37.9	0.8
110°-120°	14.8	0.3
120°-130°	8.1	0.2
130°-140°	2.4	0.0
140°-150°	0.4	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4872.1	98.0
0°-180°	4969.7	100.0



REPORT NUMBER: P895735

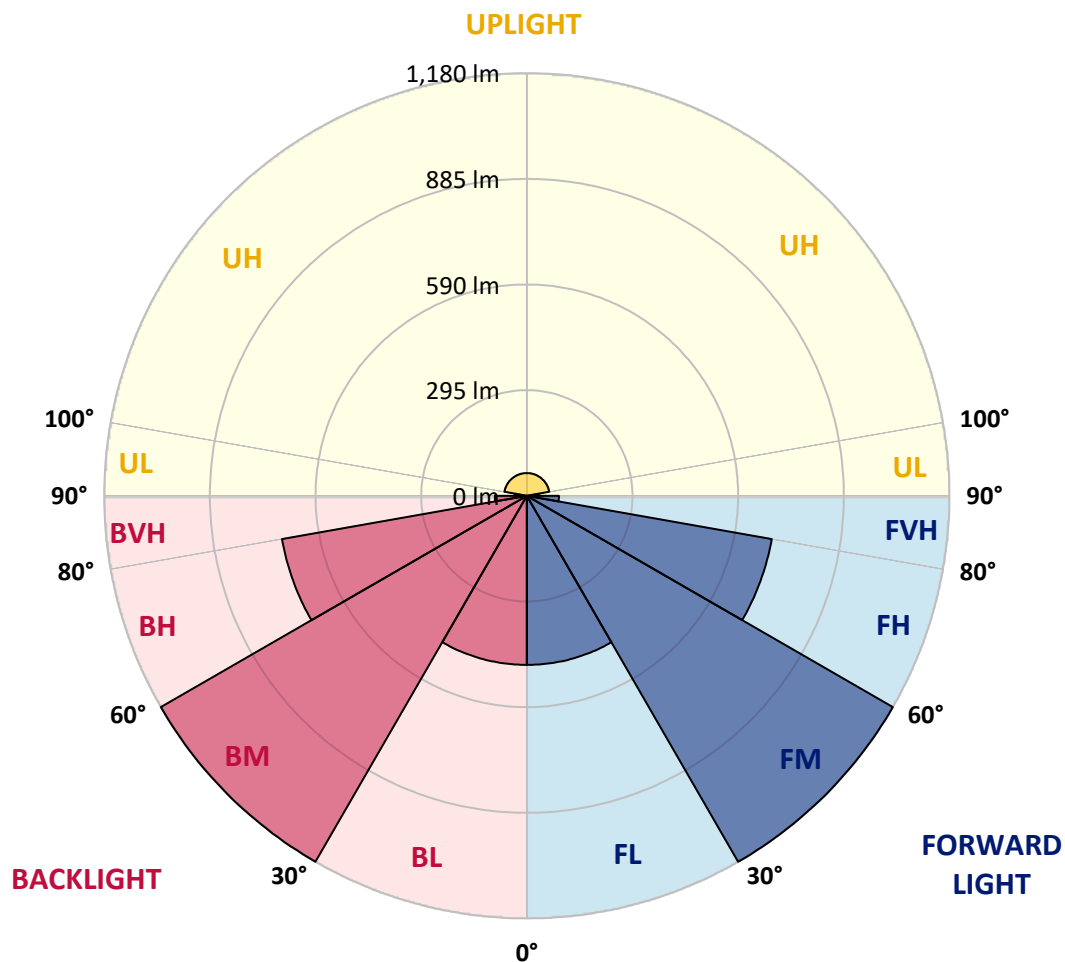
CATALOG NUMBER: CLCS15S-PC-3000K-60%

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	472.1	9.5			
FM	(30°-60°)	1180.0	23.7			
FH	(60°-80°)	694.4	14.0			G1/1800
FVH	(80°-90°)	89.5	1.8			G1/100
BL	(0°-30°)	472.1	9.5	B1/500		
BM	(30°-60°)	1180.0	23.7	B2/2500		
BH	(60°-80°)	694.4	14.0	B2/1000		G1/1800
BVH	(80°-90°)	89.5	1.8			G1/100
UL	(90°-100°)	34.1	0.7		U2/50	
UH	(100°-180°)	63.6	1.3		U3/500	

BUG Rating: B2-U3-G1

Type V Short





REPORT NUMBER: P895735

CATALOG NUMBER: CLCS15S-PC-3000K-60%

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1151.4	1151.4	1151.4	1151.4	1151.4	1151.4	1151.4	1151.4	1151.4	1151.4	1151.4
2.5°	1144.0	1144.6	1145.8	1148.3	1147.1	1147.7	1147.7	1145.8	1148.3	1147.7	1151.4
5°	1144.6	1144.6	1144.6	1147.7	1147.7	1148.3	1149.6	1149.6	1150.8	1151.4	1153.9
7.5°	1135.9	1137.2	1135.9	1138.4	1139.0	1142.1	1143.4	1142.7	1145.2	1145.2	1150.2
10°	1122.9	1123.5	1123.5	1126.0	1128.5	1132.2	1132.2	1131.6	1132.8	1132.2	1135.9
12.5°	1114.2	1114.2	1113.6	1117.3	1119.8	1122.3	1122.9	1123.5	1125.4	1127.8	1131.6
15°	1109.8	1109.8	1109.2	1114.2	1113.6	1113.6	1116.1	1118.5	1118.5	1120.4	1126.0
17.5°	1109.2	1107.4	1101.3	1108.0	1106.1	1105.6	1107.4	1106.7	1111.7	1112.3	1114.2
20°	1114.2	1111.7	1111.1	1113.0	1105.6	1103.7	1105.6	1104.4	1107.4	1108.6	1114.8
22.5°	1137.8	1136.5	1130.3	1122.9	1106.1	1098.2	1096.3	1105.6	1116.1	1114.8	1117.3
25°	1157.0	1151.4	1150.8	1150.2	1126.6	1109.2	1108.6	1121.0	1129.1	1130.3	1141.5
27.5°	1149.6	1142.7	1145.8	1147.1	1127.8	1106.7	1099.4	1117.3	1128.5	1138.4	1145.8
30°	1129.1	1124.1	1127.2	1129.7	1118.5	1100.0	1088.8	1103.7	1122.9	1138.4	1135.3
32.5°	1116.7	1116.7	1116.7	1109.2	1103.1	1091.3	1074.6	1100.6	1108.6	1114.8	1119.8
35°	1112.3	1111.7	1111.7	1103.7	1090.1	1081.4	1081.4	1087.6	1095.1	1098.2	1109.8
37.5°	1097.5	1087.6	1096.3	1098.2	1084.5	1080.2	1081.4	1082.0	1092.0	1100.6	1100.0
40°	1087.6	1075.8	1072.1	1075.8	1078.3	1078.3	1074.0	1077.1	1086.4	1090.7	1085.1
42.5°	1078.3	1070.2	1069.6	1064.0	1059.1	1066.5	1061.5	1062.8	1067.1	1077.1	1079.5
45°	1052.2	1051.0	1050.4	1049.8	1036.7	1062.8	1059.1	1052.2	1062.2	1061.5	1079.5
47.5°	1031.2	1038.0	1025.6	1026.9	1039.8	1042.9	1039.8	1035.5	1052.9	1048.5	1067.7
50°	994.6	994.6	1001.4	1010.8	1026.9	1022.5	1023.2	1033.7	1030.6	1037.3	1057.8
52.5°	993.4	971.0	963.6	972.3	992.8	1004.5	992.8	1023.2	987.8	1003.3	1009.5
55°	959.3	932.7	937.0	942.0	956.9	958.7	988.4	970.4	958.7	974.1	983.5
57.5°	919.0	897.9	889.9	915.3	911.6	937.6	933.9	931.4	940.1	938.9	940.1
60°	886.2	867.0	847.7	870.1	892.3	883.7	899.2	909.7	899.8	902.3	897.3
62.5°	842.8	842.2	827.3	837.8	834.7	855.2	849.6	862.0	858.9	855.8	863.3
65°	790.1	785.8	783.3	794.5	797.0	797.0	791.4	804.4	801.9	800.1	808.7
67.5°	726.9	725.1	727.6	728.8	741.8	743.1	740.6	751.0	749.8	748.7	751.7
70°	666.2	655.7	642.6	677.9	692.8	696.5	687.2	680.4	675.5	668.7	672.4
72.5°	648.2	636.4	638.3	661.9	660.6	666.8	651.9	630.2	630.2	622.8	625.9
75°	575.1	549.6	583.8	611.6	632.1	620.3	627.1	603.6	574.5	572.0	580.7
77.5°	497.0	482.1	482.7	520.0	554.0	564.5	545.9	518.1	494.5	487.1	492.0
80°	435.7	419.5	387.4	374.3	382.4	400.3	385.5	370.0	378.0	387.4	396.6
82.5°	272.0	268.9	278.2	260.2	234.9	226.2	227.5	246.7	248.5	245.4	248.5
85°	148.1	143.2	140.7	135.1	128.9	126.4	123.3	125.8	128.3	122.1	123.9
87.5°	67.5	65.1	68.8	72.5	67.5	66.3	65.1	65.7	65.7	66.3	66.3
90°	35.9	36.5	37.1	36.5	36.5	35.9	35.4	34.8	34.8	35.9	35.9
92.5°	28.5	27.9	26.1	25.4	24.8	24.8	24.2	24.2	24.8	25.4	25.4
95°	27.3	27.3	25.4	24.2	23.6	22.3	23.0	24.2	25.4	26.7	26.7
97.5°	41.5	41.5	39.0	35.4	31.6	28.5	31.0	35.4	37.8	39.6	39.6
100°	53.3	53.3	49.5	42.7	35.9	32.9	35.4	42.1	47.7	50.2	50.8
102.5°	55.8	55.1	50.2	42.7	34.1	30.4	33.5	41.5	48.9	52.6	53.3
105°	48.9	48.3	44.6	36.5	27.9	23.0	27.9	35.9	43.3	47.1	47.7
107.5°	40.2	40.2	37.1	29.8	20.5	16.1	20.5	29.2	35.9	38.4	39.6
110°	30.4	29.8	27.3	21.7	14.9	11.2	14.3	21.7	26.7	29.2	29.8

REPORT NUMBER: P895735

CATALOG NUMBER: CLCS15S-PC-3000K-60%

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	24.2	24.2	21.7	17.4	10.5	8.1	10.5	16.8	21.1	23.0	23.0
115°	20.5	20.5	18.6	13.7	8.7	6.8	8.7	13.7	18.0	19.2	19.2
117.5°	16.1	16.8	16.1	12.4	7.4	5.0	7.4	11.2	14.9	16.1	15.5
120°	13.0	13.7	14.9	11.8	6.8	4.3	6.8	11.2	13.7	13.0	13.0
122.5°	12.4	12.4	15.5	11.8	7.4	3.7	6.2	10.5	14.3	12.4	11.8
125°	17.4	17.4	14.9	9.3	4.3	3.1	3.7	8.1	13.7	15.5	15.5
127.5°	13.7	13.7	11.2	6.2	3.1	2.5	3.1	6.2	9.9	12.4	13.0
130°	10.5	9.9	7.4	4.3	2.5	1.9	2.5	4.3	6.2	8.1	8.7
132.5°	5.6	5.6	5.0	3.7	1.9	1.2	1.9	3.7	5.0	5.6	5.6
135°	4.3	4.3	3.7	3.1	1.9	0.6	1.9	3.1	3.7	4.3	4.3
137.5°	3.7	3.7	3.1	1.9	0.6	0.6	0.6	1.9	3.1	3.7	3.7
140°	2.5	2.5	2.5	1.2	0.6	0.6	0.6	1.2	1.9	2.5	2.5
142.5°	1.9	1.9	1.2	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.2
145°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2405-118-1

Test Date: 07/17/2024

Luminaire Tested: CLCS40S-3000K-HIGH

Data in this report applies to families of products including CLCS40S-3000K-HIGH

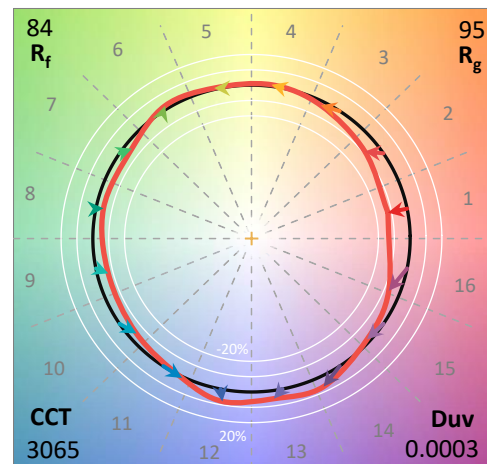
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2405-118-1
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 07/18/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Lumark
 Catalog Number: **CLCS40S-3000K-HIGH**
 Description: 120W LUMARK AP CANOPY SELECTABLE FIXTURE HIGHEST OUTPUT @3000K

Spectral Parameters

CCT (K): 3065
 CIE u' : 0.2482
 CIE v' : 0.5205
 Duv: 0.0003
 CIE x: 0.4328
 CIE y: 0.4033
 CIE z: 0.1639
 Peak Wavelength (nm): 601
 Dominant Wavelength (nm): 582
 Purity: 50.97738
 R_f: 83.6
 R_g: 95.1

CRI (Ra): 80.9
 R1: 78.9
 R2: 89.8
 R3: 96.2
 R4: 78.4
 R5: 79.1
 R6: 87.3
 R7: 81.8
 R8: 56.0
 R9: -0.8
 R10: 76.7
 R11: 77.3
 R12: 67.5
 R13: 81.4
 R14: 98.5
 R15: 71.1



Test Conditions

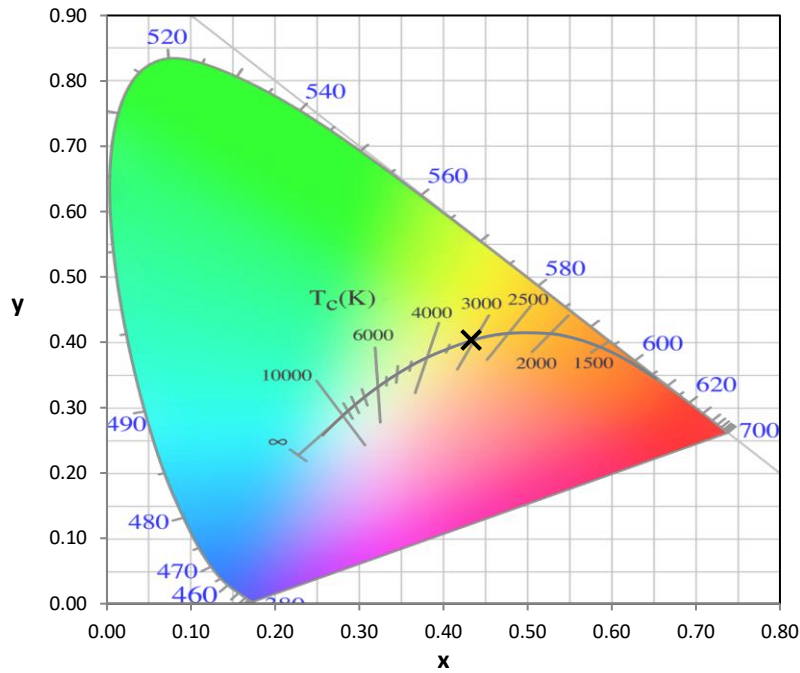
Stabilization Time: 60M
 Operation Time: 1H 60M
 Sphere Temperature (°C): 24.0

REPORT NUMBER: SP1-2405-118-1

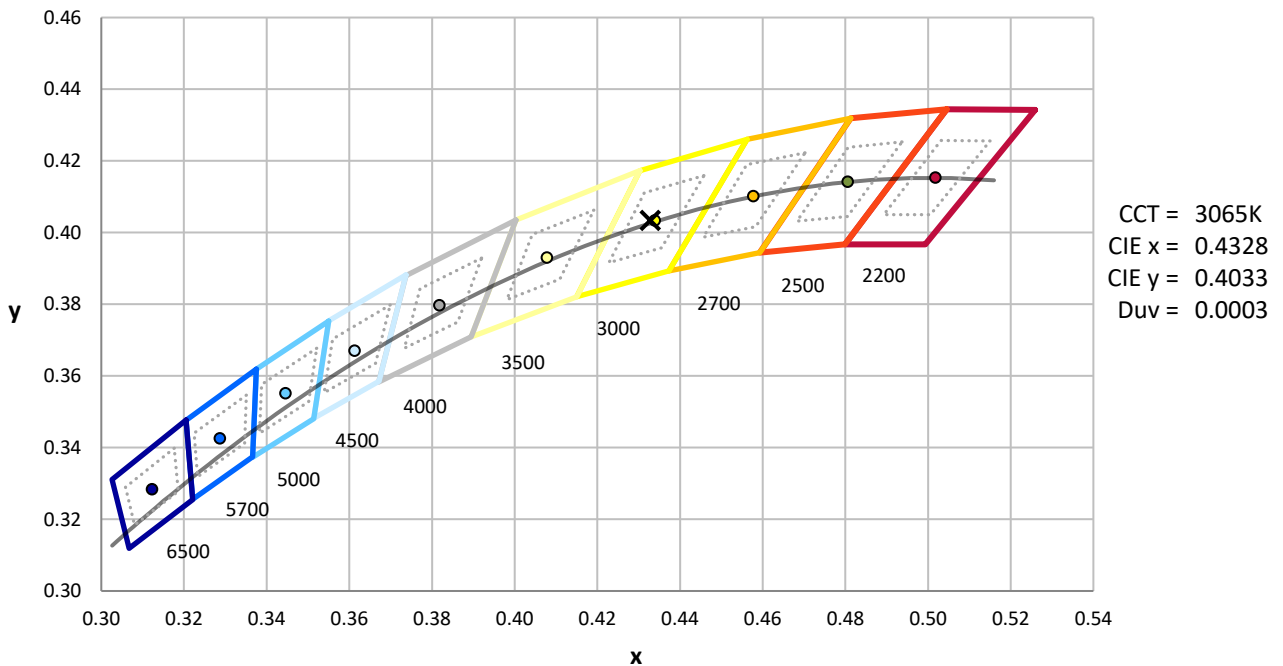
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2405-118-1

CIE 1931 Chromaticity Diagram



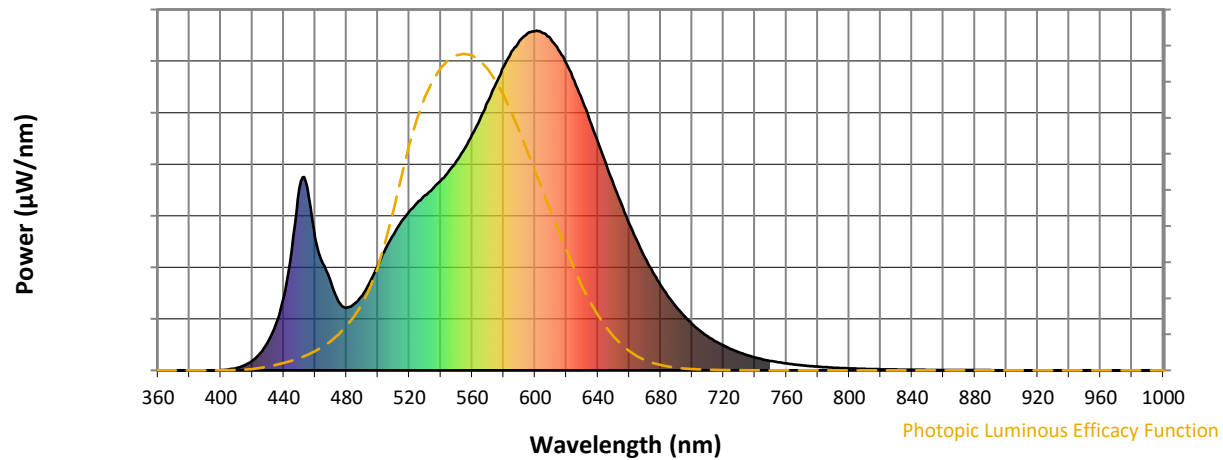
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2405-118-1

Photopic Flux vs. Wavelength

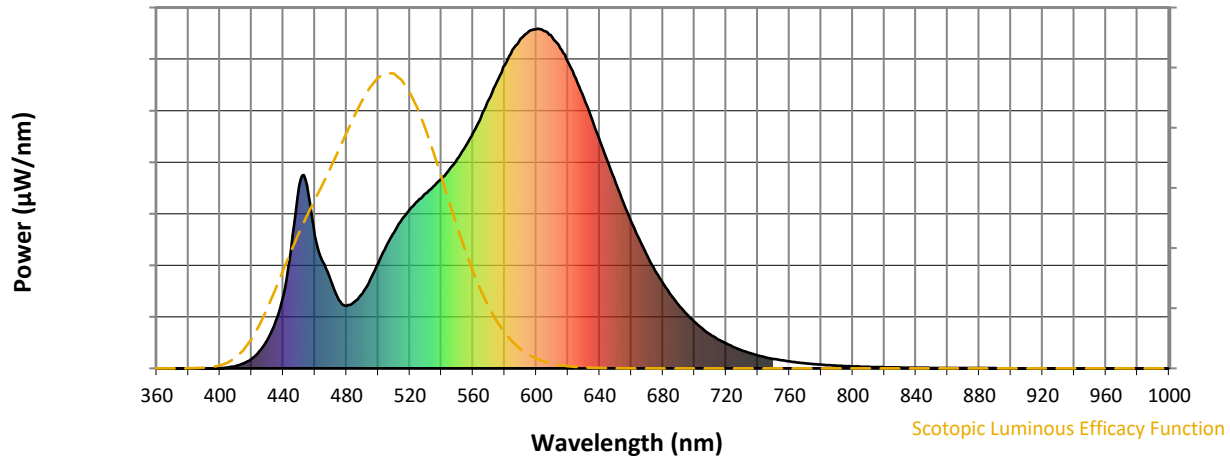


Photopic Lumens: NR

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	221	NR	620	902	NR	750	28	NR	880	1	NR
365	0	NR	495	261	NR	625	853	NR	755	24	NR	885	1	NR
370	0	NR	500	309	NR	630	796	NR	760	20	NR	890	1	NR
375	0	NR	505	359	NR	635	735	NR	765	17	NR	895	0	NR
380	0	NR	510	401	NR	640	673	NR	770	15	NR	900	0	NR
385	0	NR	515	438	NR	645	609	NR	775	13	NR	905	0	NR
390	0	NR	520	469	NR	650	547	NR	780	11	NR	910	0	NR
395	0	NR	525	493	NR	655	489	NR	785	9	NR	915	0	NR
400	1	NR	530	515	NR	660	432	NR	790	8	NR	920	0	NR
405	3	NR	535	536	NR	665	381	NR	795	7	NR	925	0	NR
410	7	NR	540	558	NR	670	331	NR	800	6	NR	930	0	NR
415	15	NR	545	586	NR	675	288	NR	805	5	NR	935	0	NR
420	28	NR	550	616	NR	680	251	NR	810	4	NR	940	0	NR
425	51	NR	555	652	NR	685	216	NR	815	4	NR	945	0	NR
430	84	NR	560	694	NR	690	187	NR	820	3	NR	950	0	NR
435	136	NR	565	740	NR	695	160	NR	825	3	NR	955	0	NR
440	215	NR	570	791	NR	700	137	NR	830	2	NR	960	0	NR
445	352	NR	575	843	NR	705	117	NR	835	2	NR	965	0	NR
450	536	NR	580	893	NR	710	100	NR	840	2	NR	970	0	NR
455	538	NR	585	938	NR	715	85	NR	845	2	NR	975	0	NR
460	391	NR	590	970	NR	720	73	NR	850	1	NR	980	0	NR
465	313	NR	595	991	NR	725	62	NR	855	1	NR	985	0	NR
470	259	NR	600	998	NR	730	53	NR	860	1	NR	990	0	NR
475	202	NR	605	993	NR	735	45	NR	865	1	NR	995	0	NR
480	184	NR	610	975	NR	740	38	NR	870	1	NR	1000	0	NR
485	196	NR	615	943	NR	745	32	NR	875	1	NR			

REPORT NUMBER: SP1-2405-118-1

Scotopic Flux vs. Wavelength

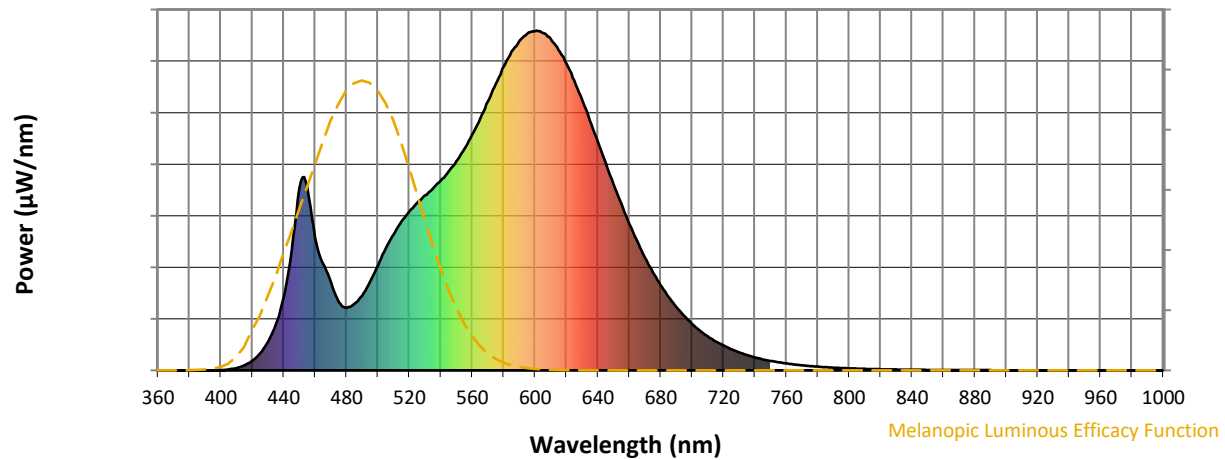


Scotopic Lumens: NR

S/P: 1.35

λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)
360	0	NR	490	221	NR	620	902	NR	750	28	NR	880	1	NR
365	0	NR	495	261	NR	625	853	NR	755	24	NR	885	1	NR
370	0	NR	500	309	NR	630	796	NR	760	20	NR	890	1	NR
375	0	NR	505	359	NR	635	735	NR	765	17	NR	895	0	NR
380	0	NR	510	401	NR	640	673	NR	770	15	NR	900	0	NR
385	0	NR	515	438	NR	645	609	NR	775	13	NR	905	0	NR
390	0	NR	520	469	NR	650	547	NR	780	11	NR	910	0	NR
395	0	NR	525	493	NR	655	489	NR	785	9	NR	915	0	NR
400	1	NR	530	515	NR	660	432	NR	790	8	NR	920	0	NR
405	3	NR	535	536	NR	665	381	NR	795	7	NR	925	0	NR
410	7	NR	540	558	NR	670	331	NR	800	6	NR	930	0	NR
415	15	NR	545	586	NR	675	288	NR	805	5	NR	935	0	NR
420	28	NR	550	616	NR	680	251	NR	810	4	NR	940	0	NR
425	51	NR	555	652	NR	685	216	NR	815	4	NR	945	0	NR
430	84	NR	560	694	NR	690	187	NR	820	3	NR	950	0	NR
435	136	NR	565	740	NR	695	160	NR	825	3	NR	955	0	NR
440	215	NR	570	791	NR	700	137	NR	830	2	NR	960	0	NR
445	352	NR	575	843	NR	705	117	NR	835	2	NR	965	0	NR
450	536	NR	580	893	NR	710	100	NR	840	2	NR	970	0	NR
455	538	NR	585	938	NR	715	85	NR	845	2	NR	975	0	NR
460	391	NR	590	970	NR	720	73	NR	850	1	NR	980	0	NR
465	313	NR	595	991	NR	725	62	NR	855	1	NR	985	0	NR
470	259	NR	600	998	NR	730	53	NR	860	1	NR	990	0	NR
475	202	NR	605	993	NR	735	45	NR	865	1	NR	995	0	NR
480	184	NR	610	975	NR	740	38	NR	870	1	NR	1000	0	NR
485	196	NR	615	943	NR	745	32	NR	875	1	NR			

REPORT NUMBER: SP1-2405-118-1

Melanopic Flux vs. Wavelength

Melanopic Lumens: NR
M/P: 2.61

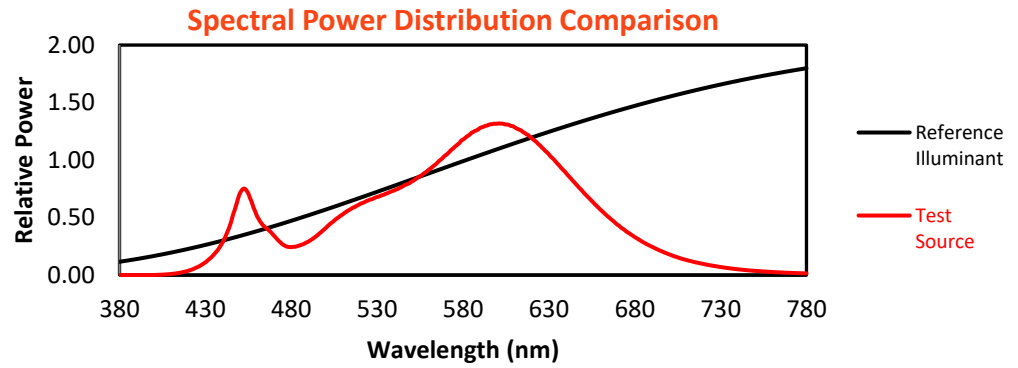
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	221	NR	620	902	NR	750	28	NR	880	1	NR
365	0	NR	495	261	NR	625	853	NR	755	24	NR	885	1	NR
370	0	NR	500	309	NR	630	796	NR	760	20	NR	890	1	NR
375	0	NR	505	359	NR	635	735	NR	765	17	NR	895	0	NR
380	0	NR	510	401	NR	640	673	NR	770	15	NR	900	0	NR
385	0	NR	515	438	NR	645	609	NR	775	13	NR	905	0	NR
390	0	NR	520	469	NR	650	547	NR	780	11	NR	910	0	NR
395	0	NR	525	493	NR	655	489	NR	785	9	NR	915	0	NR
400	1	NR	530	515	NR	660	432	NR	790	8	NR	920	0	NR
405	3	NR	535	536	NR	665	381	NR	795	7	NR	925	0	NR
410	7	NR	540	558	NR	670	331	NR	800	6	NR	930	0	NR
415	15	NR	545	586	NR	675	288	NR	805	5	NR	935	0	NR
420	28	NR	550	616	NR	680	251	NR	810	4	NR	940	0	NR
425	51	NR	555	652	NR	685	216	NR	815	4	NR	945	0	NR
430	84	NR	560	694	NR	690	187	NR	820	3	NR	950	0	NR
435	136	NR	565	740	NR	695	160	NR	825	3	NR	955	0	NR
440	215	NR	570	791	NR	700	137	NR	830	2	NR	960	0	NR
445	352	NR	575	843	NR	705	117	NR	835	2	NR	965	0	NR
450	536	NR	580	893	NR	710	100	NR	840	2	NR	970	0	NR
455	538	NR	585	938	NR	715	85	NR	845	2	NR	975	0	NR
460	391	NR	590	970	NR	720	73	NR	850	1	NR	980	0	NR
465	313	NR	595	991	NR	725	62	NR	855	1	NR	985	0	NR
470	259	NR	600	998	NR	730	53	NR	860	1	NR	990	0	NR
475	202	NR	605	993	NR	735	45	NR	865	1	NR	995	0	NR
480	184	NR	610	975	NR	740	38	NR	870	1	NR	1000	0	NR
485	196	NR	615	943	NR	745	32	NR	875	1	NR			

REPORT NUMBER: SP1-2405-118-1

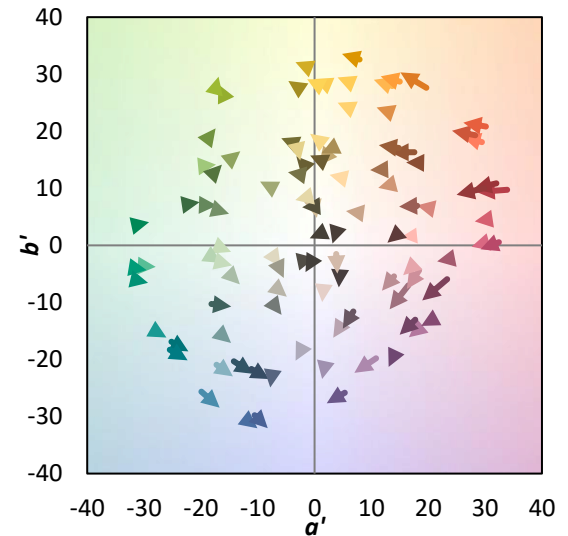
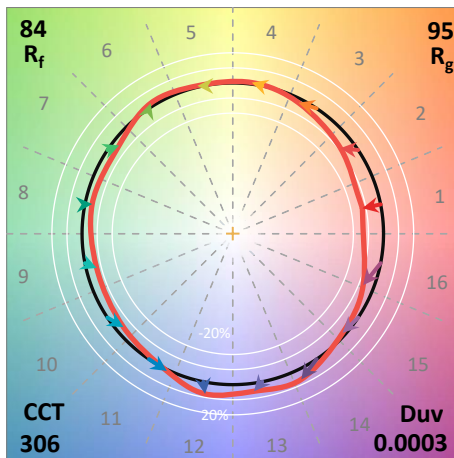
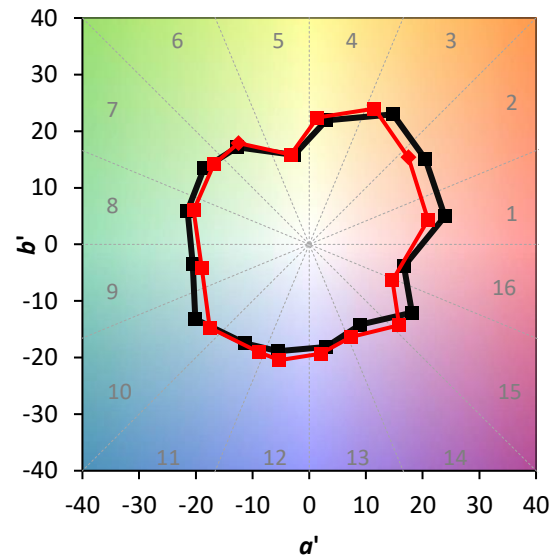
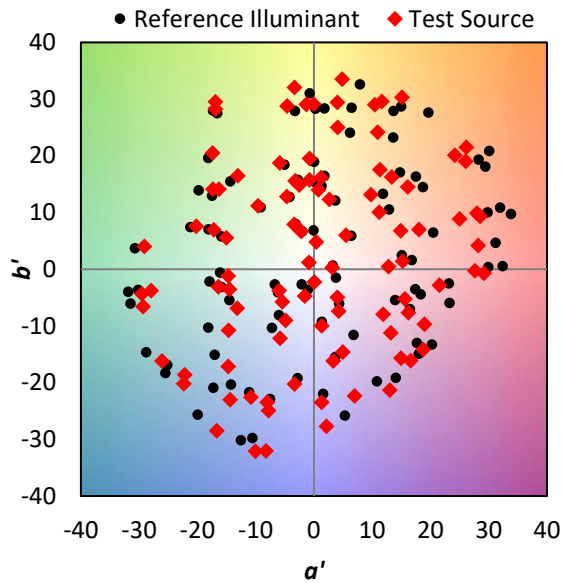
TM-30-18

Summary

$R_f = 83.6$
 $R_g = 95.1$
 $CIE R_a = 80.9$
 $R_g = -0.8$

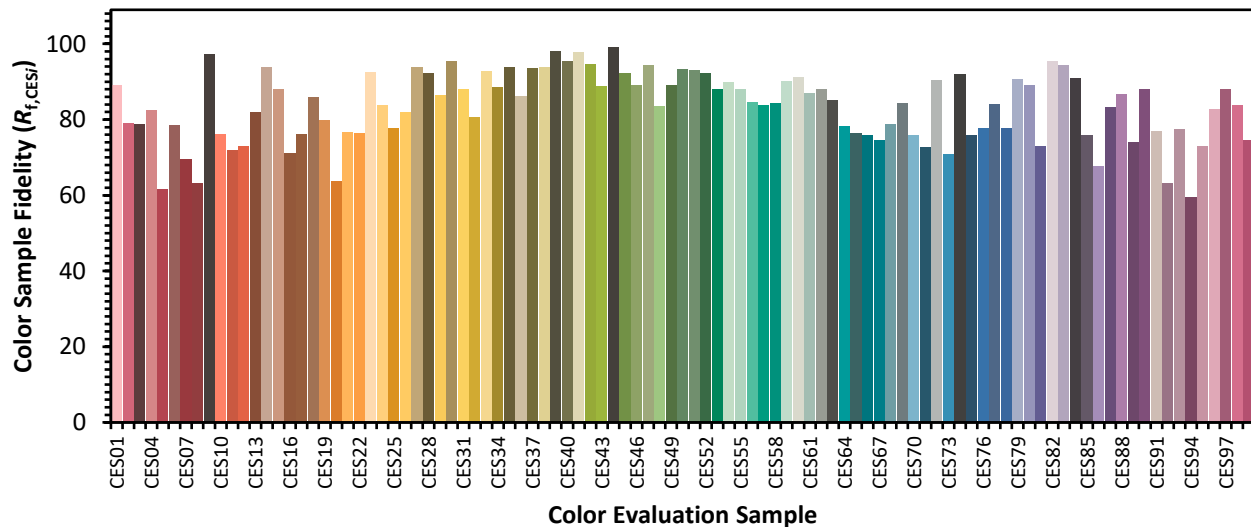


Color Vector Graphics

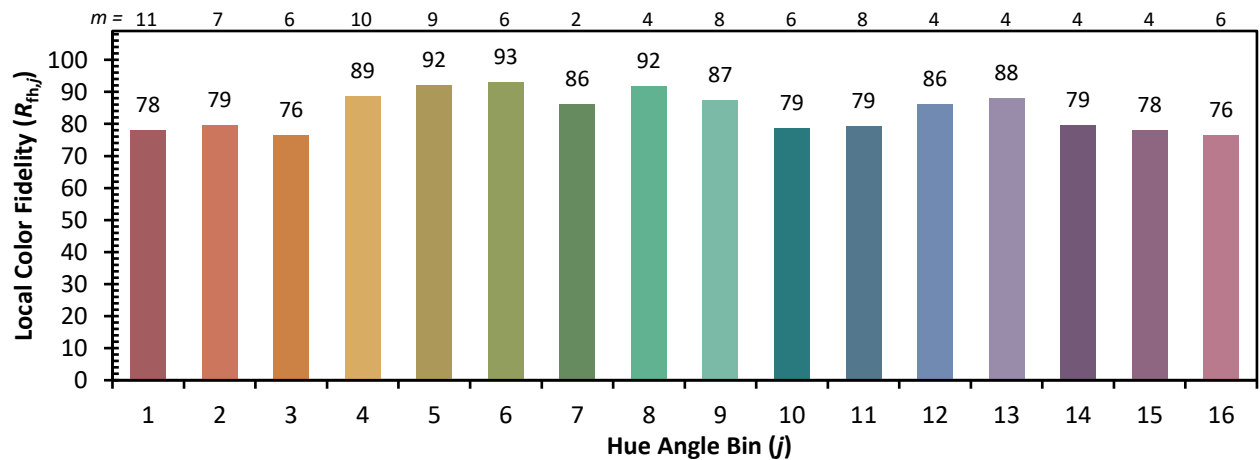
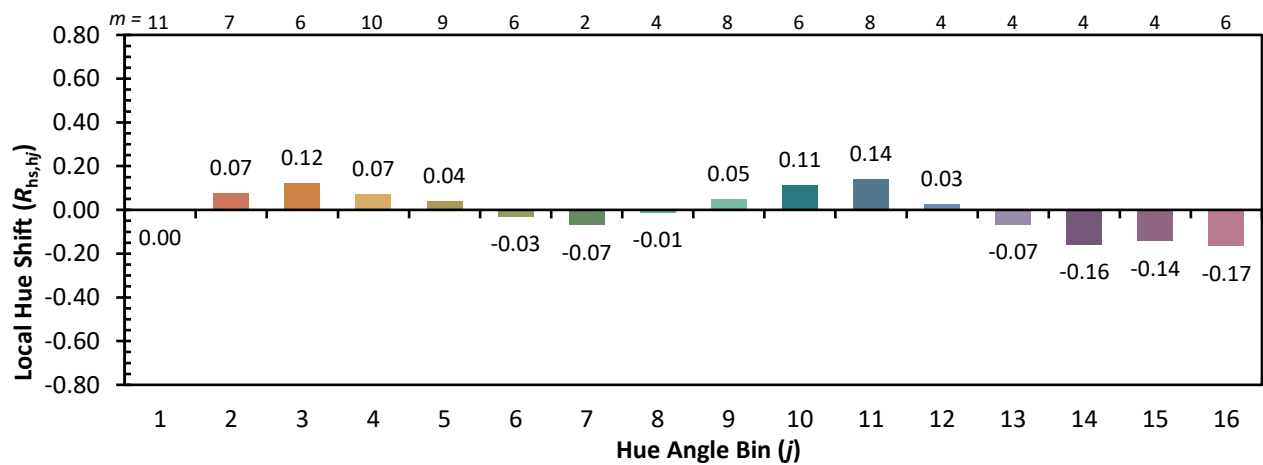
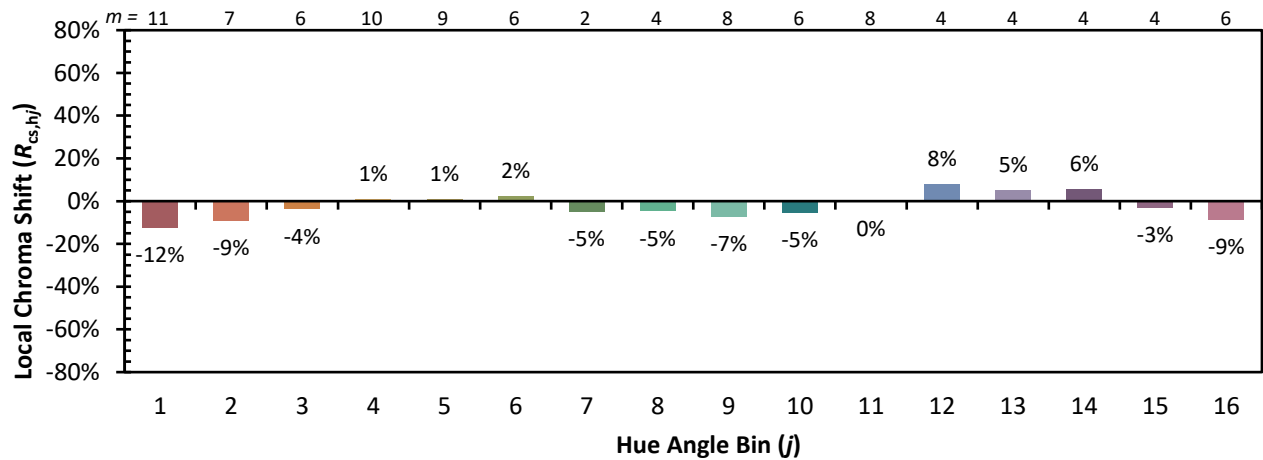


Individual Sample Fidelity Index ($R_{f,i}$)

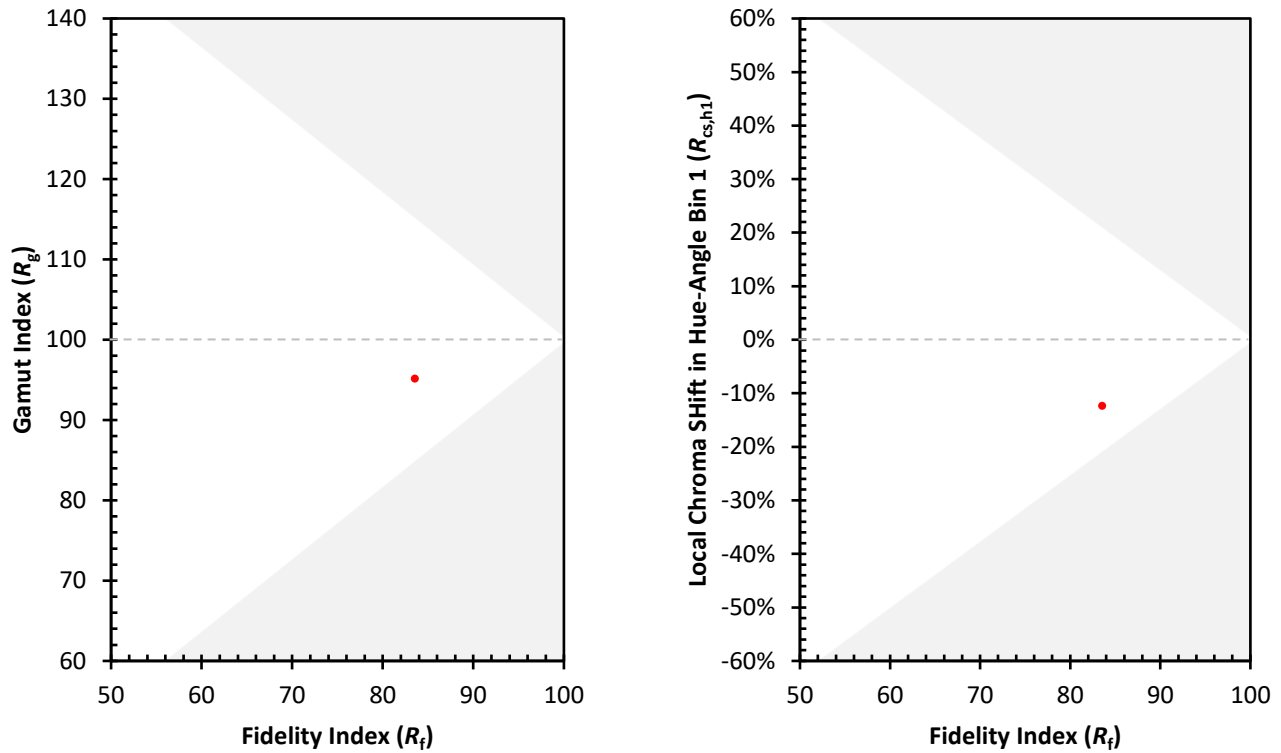
CES01 = 86	CES26 = 82	CES51 = 93	CES76 = 78
CES02 = 63	CES27 = 94	CES52 = 92	CES77 = 84
CES03 = 31	CES28 = 92	CES53 = 88	CES78 = 78
CES04 = 70	CES29 = 86	CES54 = 90	CES79 = 91
CES05 = 49	CES30 = 96	CES55 = 88	CES80 = 89
CES06 = 51	CES31 = 88	CES56 = 85	CES81 = 73
CES07 = 42	CES32 = 81	CES57 = 84	CES82 = 95
CES08 = 41	CES33 = 93	CES58 = 84	CES83 = 94
CES09 = 29	CES34 = 89	CES59 = 90	CES84 = 91
CES10 = 76	CES35 = 94	CES60 = 91	CES85 = 76
CES11 = 59	CES36 = 86	CES61 = 87	CES86 = 68
CES12 = 65	CES37 = 94	CES62 = 88	CES87 = 83
CES13 = 43	CES38 = 94	CES63 = 85	CES88 = 87
CES14 = 74	CES39 = 98	CES64 = 78	CES89 = 74
CES15 = 71	CES40 = 96	CES65 = 76	CES90 = 88
CES16 = 47	CES41 = 98	CES66 = 76	CES91 = 77
CES17 = 50	CES42 = 95	CES67 = 74	CES92 = 63
CES18 = 56	CES43 = 89	CES68 = 79	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 84	CES94 = 60
CES20 = 66	CES45 = 92	CES70 = 76	CES95 = 73
CES21 = 87	CES46 = 89	CES71 = 73	CES96 = 83
CES22 = 79	CES47 = 94	CES72 = 90	CES97 = 88
CES23 = 92	CES48 = 84	CES73 = 71	CES98 = 84
CES24 = 91	CES49 = 89	CES74 = 92	CES99 = 75
CES25 = 72	CES50 = 93	CES75 = 76	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)