

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: P895743

Luminaire Tested: **CLCS15S-PC-5000K-60%**

Issue Date: 11/14/2024

Test Information

Test Method: LM-79-08
Report Number: P895743
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: CLCS15S-PC-5000K-60%
Description: LUMARK SMALL LED CANOPY 8000LM, 60W, PC 80 CRI 5000K FIXTURE @ 60%
OUTPUT
Light Source: 5000K CCT,80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5289.8 lumens
Efficiency: N/A
Efficacy: 144.9 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

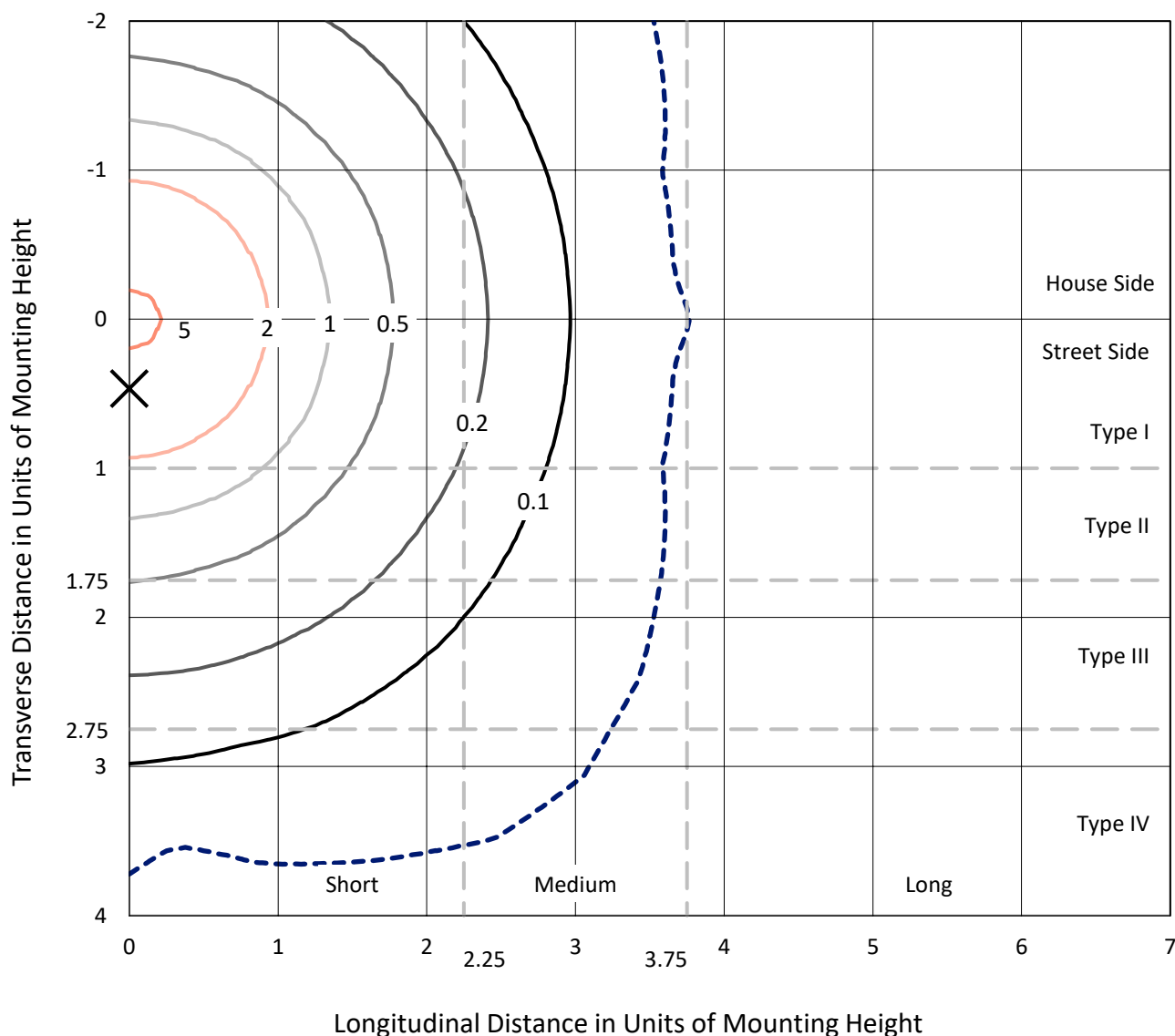
REPORT NUMBER: P895743

CATALOG NUMBER: CLCS15S-PC-5000K-60%

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

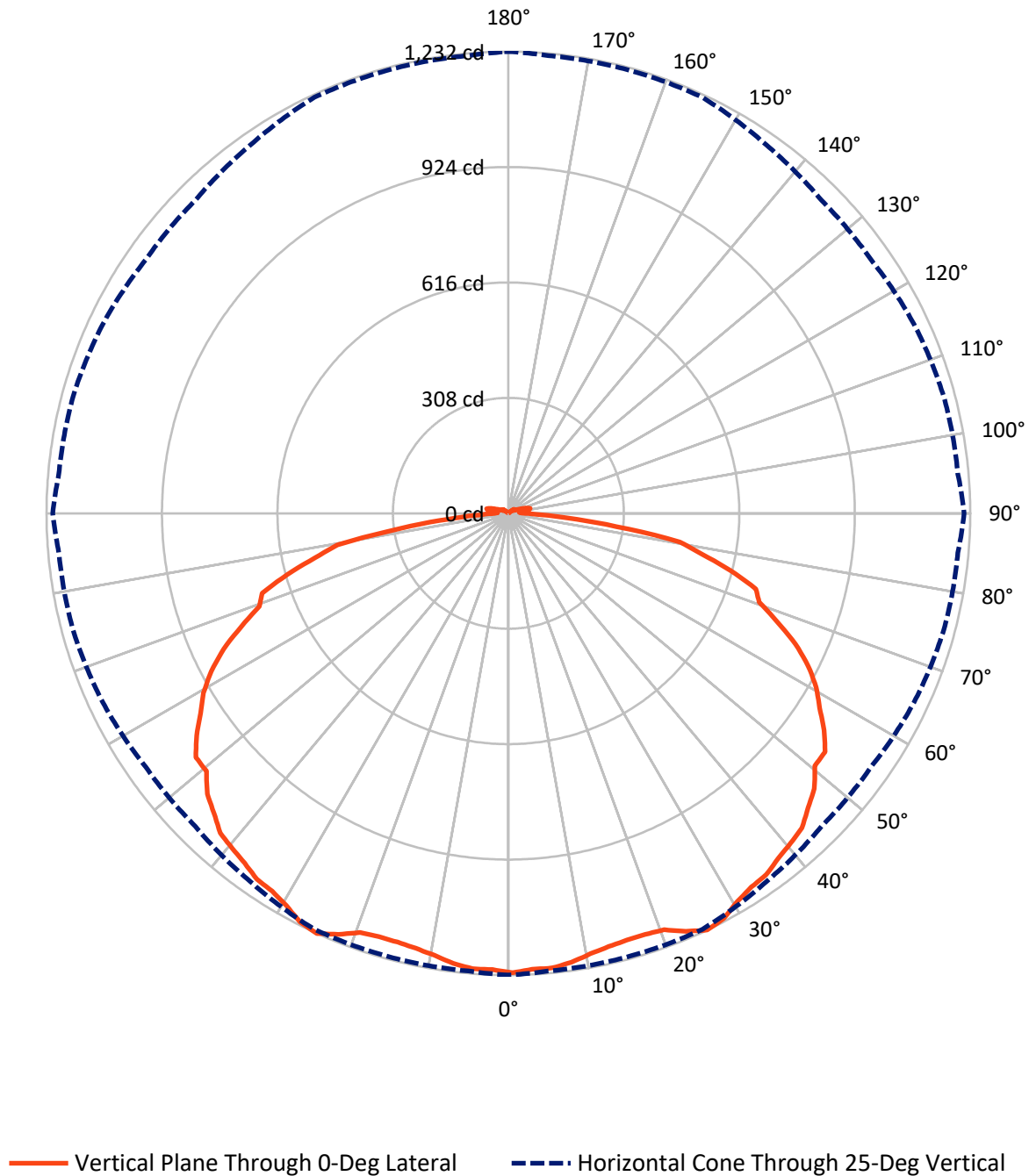


Based on 15 foot mounting height. Maximum calculated value = 5.4 fc

Type V - Short - N/A

REPORT NUMBER: P895743
CATALOG NUMBER: CLCS15S-PC-5000K-60%

Luminous Intensity Polar Plot



REPORT NUMBER: P895743

CATALOG NUMBER: CLCS15S-PC-5000K-60%

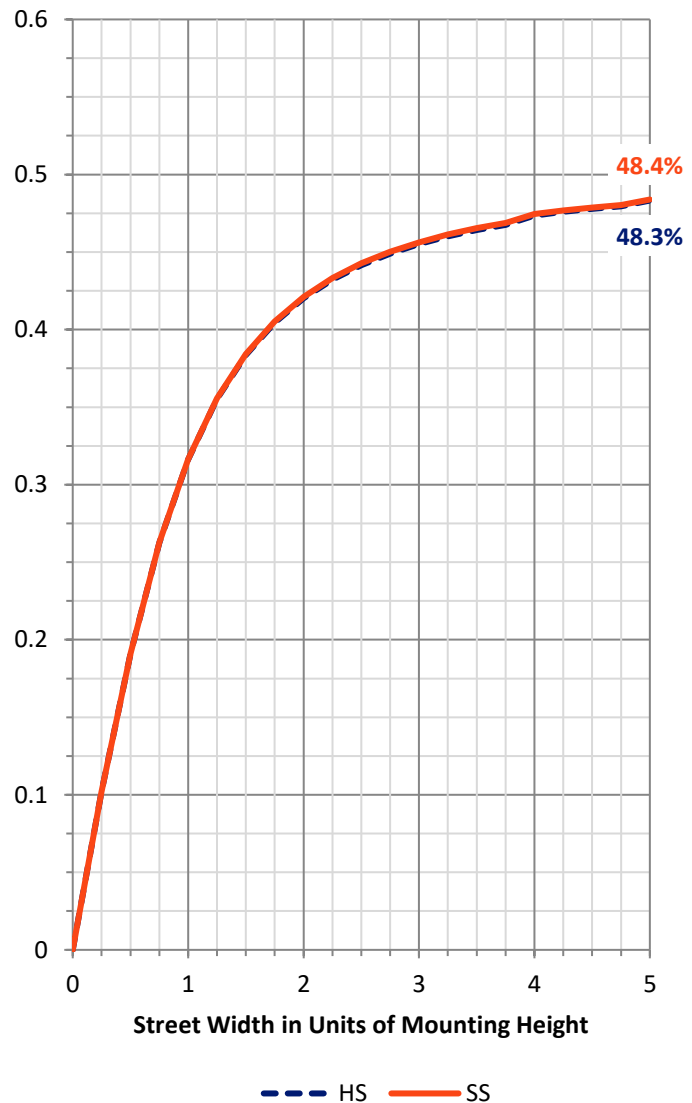
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2592.9	52.0	2644.9
	% Fixture	49.0	1.0	50.0
Street Side	Lumens	2592.9	52.0	2644.9
	% Fixture	49.0	1.0	50.0
Total	Lumens	5185.8	104.0	5289.8
	% Fixture	98.0	2.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.0	2.2
10°-20°	336.2	6.4
20°-30°	552.9	10.5
30°-40°	733.0	13.9
40°-50°	867.0	16.4
50°-60°	912.0	17.2
60°-70°	834.1	15.8
70°-80°	644.1	12.2
80°-90°	190.6	3.6
90°-100°	36.3	0.7
100°-110°	40.3	0.8
110°-120°	15.7	0.3
120°-130°	8.6	0.2
130°-140°	2.6	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°	5185.8	98.0
0°-180°	5289.8	100.0



REPORT NUMBER: P895743

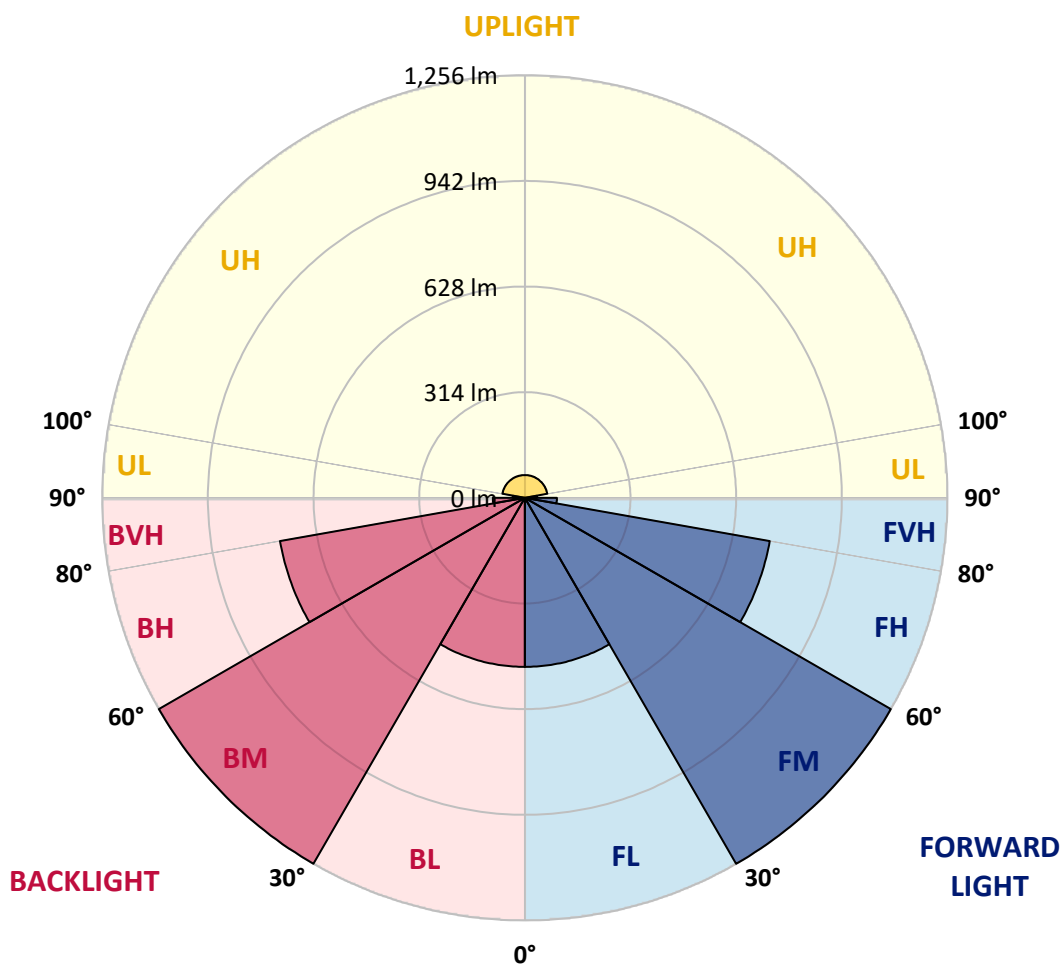
CATALOG NUMBER: CLCS15S-PC-5000K-60%

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	502.5	9.5			
FM	(30°-60°)	1256.0	23.7			
FH	(60°-80°)	739.1	14.0			G1/1800
FVH	(80°-90°)	95.3	1.8			G1/100
BL	(0°-30°)	502.5	9.5	B2/1000		
BM	(30°-60°)	1256.0	23.7	B2/2500		
BH	(60°-80°)	739.1	14.0	B2/1000		G1/1800
BVH	(80°-90°)	95.3	1.8			G1/100
UL	(90°-100°)	36.3	0.7		U2/50	
UH	(100°-180°)	67.7	1.3		U3/500	

BUG Rating: B2-U3-G1

Type V Short





REPORT NUMBER: P895743

CATALOG NUMBER: CLCS15S-PC-5000K-60%

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1225.5	1225.5	1225.5	1225.5	1225.5	1225.5	1225.5	1225.5	1225.5	1225.5	1225.5
2.5°	1217.7	1218.3	1219.7	1222.2	1220.9	1221.6	1221.6	1219.7	1222.2	1221.6	1225.5
5°	1218.3	1218.3	1218.3	1221.6	1221.6	1222.2	1223.5	1223.5	1224.9	1225.5	1228.2
7.5°	1209.1	1210.4	1209.1	1211.7	1212.4	1215.7	1217.0	1216.4	1219.0	1219.0	1224.2
10°	1195.2	1195.9	1195.9	1198.5	1201.1	1205.1	1205.1	1204.5	1205.8	1205.1	1209.1
12.5°	1186.0	1186.0	1185.4	1189.2	1191.9	1194.5	1195.2	1195.9	1197.8	1200.5	1204.5
15°	1181.4	1181.4	1180.7	1186.0	1185.4	1185.4	1187.9	1190.6	1190.6	1192.5	1198.5
17.5°	1180.7	1178.8	1172.1	1179.4	1177.4	1176.8	1178.8	1178.1	1183.4	1184.0	1186.0
20°	1186.0	1183.4	1182.7	1184.7	1176.8	1174.8	1176.8	1175.4	1178.8	1180.1	1186.6
22.5°	1211.1	1209.7	1203.1	1195.2	1177.4	1168.8	1166.8	1176.8	1187.9	1186.6	1189.2
25°	1231.5	1225.5	1224.9	1224.2	1199.2	1180.7	1180.1	1193.2	1201.8	1203.1	1215.0
27.5°	1223.5	1216.4	1219.7	1220.9	1200.5	1178.1	1170.2	1189.2	1201.1	1211.7	1219.7
30°	1201.8	1196.5	1199.8	1202.5	1190.6	1170.8	1158.9	1174.8	1195.2	1211.7	1208.4
32.5°	1188.6	1188.6	1188.6	1180.7	1174.1	1161.6	1143.8	1171.5	1180.1	1186.6	1191.9
35°	1184.0	1183.4	1183.4	1174.8	1160.2	1151.1	1151.1	1157.6	1165.5	1168.8	1181.4
37.5°	1168.2	1157.6	1166.8	1168.8	1154.3	1149.7	1151.1	1151.7	1162.2	1171.5	1170.8
40°	1157.6	1145.1	1141.1	1145.1	1147.8	1147.8	1143.1	1146.4	1156.3	1160.9	1154.9
42.5°	1147.8	1139.2	1138.5	1132.5	1127.3	1135.2	1129.9	1131.2	1135.9	1146.4	1149.1
45°	1120.0	1118.7	1118.0	1117.4	1103.5	1131.2	1127.3	1120.0	1130.6	1129.9	1149.1
47.5°	1097.6	1104.9	1091.6	1093.0	1106.8	1110.2	1106.8	1102.2	1120.6	1116.1	1136.5
50°	1058.7	1058.7	1065.9	1075.9	1093.0	1088.3	1089.0	1100.2	1096.9	1104.2	1125.9
52.5°	1057.3	1033.6	1025.7	1034.9	1056.7	1069.2	1056.7	1089.0	1051.4	1067.9	1074.5
55°	1021.1	992.7	997.3	1002.6	1018.4	1020.4	1052.0	1033.0	1020.4	1036.9	1046.9
57.5°	978.3	955.8	947.2	974.3	970.3	998.0	994.0	991.4	1000.6	999.3	1000.6
60°	943.3	922.8	902.4	926.1	949.8	940.6	957.1	968.3	957.7	960.4	955.1
62.5°	897.1	896.4	880.5	891.8	888.5	910.3	904.4	917.5	914.2	911.0	918.8
65°	841.1	836.4	833.8	845.6	848.2	848.2	842.4	856.2	853.5	851.5	860.8
67.5°	773.7	771.8	774.3	775.7	789.6	790.9	788.2	799.5	798.2	796.8	800.1
70°	709.0	697.9	684.0	721.6	737.5	741.4	731.5	724.3	719.0	711.7	715.7
72.5°	690.0	677.4	679.4	704.5	703.2	709.7	693.9	670.8	670.8	662.9	666.2
75°	612.1	585.1	621.4	651.0	672.8	660.3	667.6	642.4	611.4	608.8	618.1
77.5°	529.0	513.2	513.8	553.4	589.7	601.0	581.1	551.4	526.4	518.5	523.8
80°	463.8	446.6	412.3	398.4	407.0	426.1	410.3	393.8	402.3	412.3	422.2
82.5°	289.6	286.3	296.1	277.0	250.0	240.8	242.1	262.5	264.5	261.2	264.5
85°	157.6	152.4	149.8	143.8	137.2	134.6	131.2	133.9	136.5	129.9	131.9
87.5°	71.9	69.3	73.2	77.2	71.9	70.6	69.3	69.9	69.9	70.6	70.6
90°	38.3	38.9	39.6	38.9	38.9	38.3	37.6	36.9	36.9	38.3	38.3
92.5°	30.3	29.7	27.7	27.0	26.4	26.4	25.7	25.7	26.4	27.0	27.0
95°	29.0	29.0	27.0	25.7	25.0	23.7	24.4	25.7	27.0	28.3	28.3
97.5°	44.2	44.2	41.6	37.6	33.6	30.3	33.0	37.6	40.3	42.2	42.2
100°	56.7	56.7	52.7	45.5	38.3	35.0	37.6	44.9	50.8	53.4	54.0
102.5°	59.3	58.7	53.4	45.5	36.3	32.3	35.6	44.2	52.1	56.0	56.7
105°	52.1	51.5	47.5	38.9	29.7	24.4	29.7	38.3	46.2	50.2	50.8
107.5°	42.9	42.9	39.6	31.7	21.7	17.2	21.7	31.0	38.3	40.9	42.2
110°	32.3	31.7	29.0	23.1	15.9	11.9	15.2	23.1	28.3	31.0	31.7



REPORT NUMBER: P895743

CATALOG NUMBER: CLCS15S-PC-5000K-60%

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	25.7	25.7	23.1	18.4	11.2	8.6	11.2	17.8	22.4	24.4	24.4
115°	21.7	21.7	19.7	14.6	9.3	7.3	9.3	14.6	19.1	20.4	20.4
117.5°	17.2	17.8	17.2	13.2	7.9	5.3	7.9	11.9	15.9	17.2	16.5
120°	13.9	14.6	15.9	12.6	7.3	4.6	7.3	11.9	14.6	13.9	13.9
122.5°	13.2	13.2	16.5	12.6	7.9	4.0	6.6	11.2	15.2	13.2	12.6
125°	18.4	18.4	15.9	9.9	4.6	3.3	4.0	8.6	14.6	16.5	16.5
127.5°	14.6	14.6	11.9	6.6	3.3	2.6	3.3	6.6	10.6	13.2	13.9
130°	11.2	10.6	7.9	4.6	2.6	2.0	2.6	4.6	6.6	8.6	9.3
132.5°	6.0	6.0	5.3	4.0	2.0	1.3	2.0	4.0	5.3	6.0	6.0
135°	4.6	4.6	4.0	3.3	2.0	0.7	2.0	3.3	4.0	4.6	4.6
137.5°	4.0	4.0	3.3	2.0	0.7	0.7	0.7	2.0	3.3	4.0	4.0
140°	2.6	2.6	2.6	1.3	0.7	0.7	0.7	1.3	2.0	2.6	2.6
142.5°	2.0	2.0	1.3	0.7	0.7	0.7	0.7	0.7	0.7	1.3	1.3
145°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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: SP1-2405-118-3

Test Date: 07/18/2024

Luminaire Tested: CLCS40S-5000K-HIGH

Data in this report applies to families of products including CLCS40S-5000K-HIGH

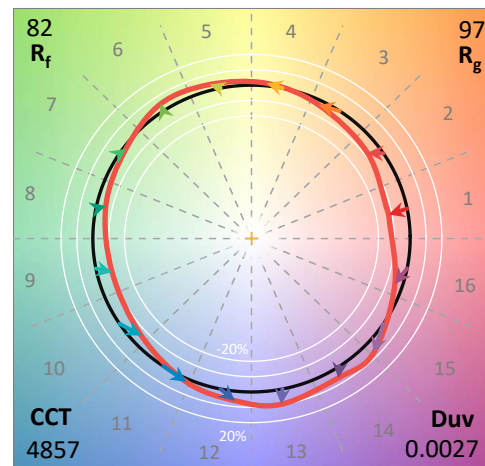
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2405-118-3
 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-5000K-HIGH**
 Description: 120W LUMARK AP CANOPY SELECTABLE FIXTURE HIGHEST OUTPUT @5000K

Spectral Parameters

CCT (K): 4857
 CIE u' : 0.2111
 CIE v' : 0.4898
 Duv: 0.0027
 CIE x: 0.3499
 CIE y: 0.3609
 CIE z: 0.2892
 Peak Wavelength (nm): 451
 Dominant Wavelength (nm): 572
 Purity: 13.28172
 R_f: 82.4
 R_g: 96.8

CRI (Ra): 81.9
 R1: 80.4
 R2: 86.0
 R3: 89.7
 R4: 82.2
 R5: 80.0
 R6: 80.1
 R7: 88.2
 R8: 68.4
 R9: 8.5
 R10: 66.0
 R11: 80.6
 R12: 52.5
 R13: 81.8
 R14: 94.3
 R15: 74.7



Test Conditions

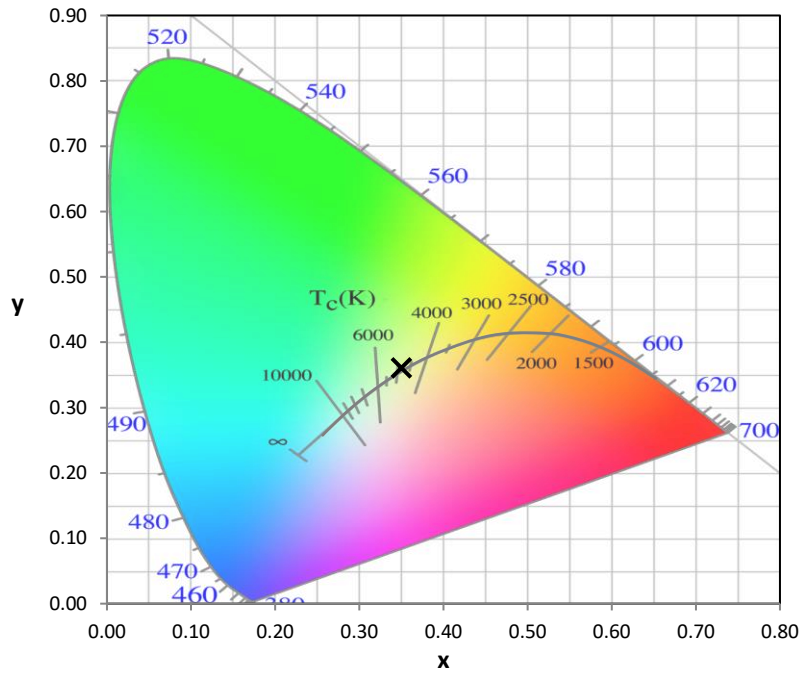
Stabilization Time: 72M
 Operation Time: 2H 12M
 Sphere Temperature (°C): 24.0

REPORT NUMBER: SP1-2405-118-3

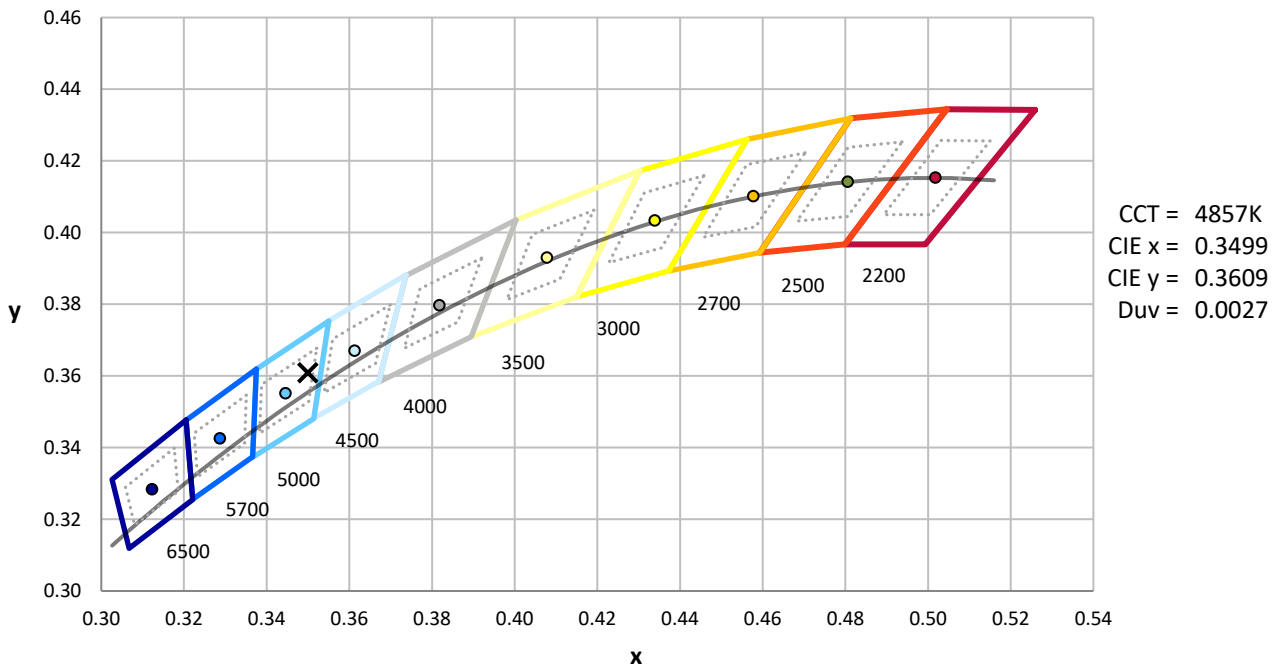
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2405-118-3

CIE 1931 Chromaticity Diagram



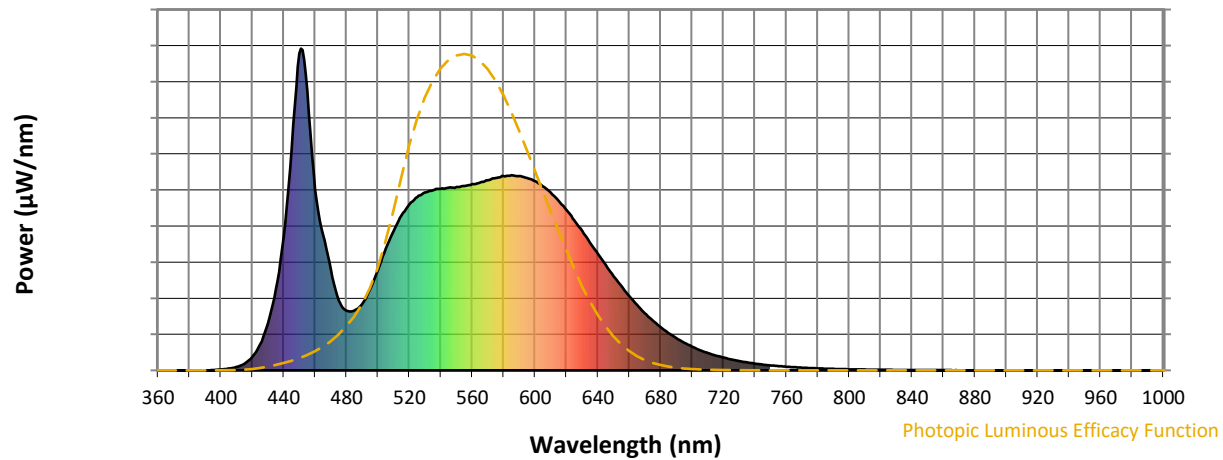
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2405-118-3

Photopic Flux vs. Wavelength

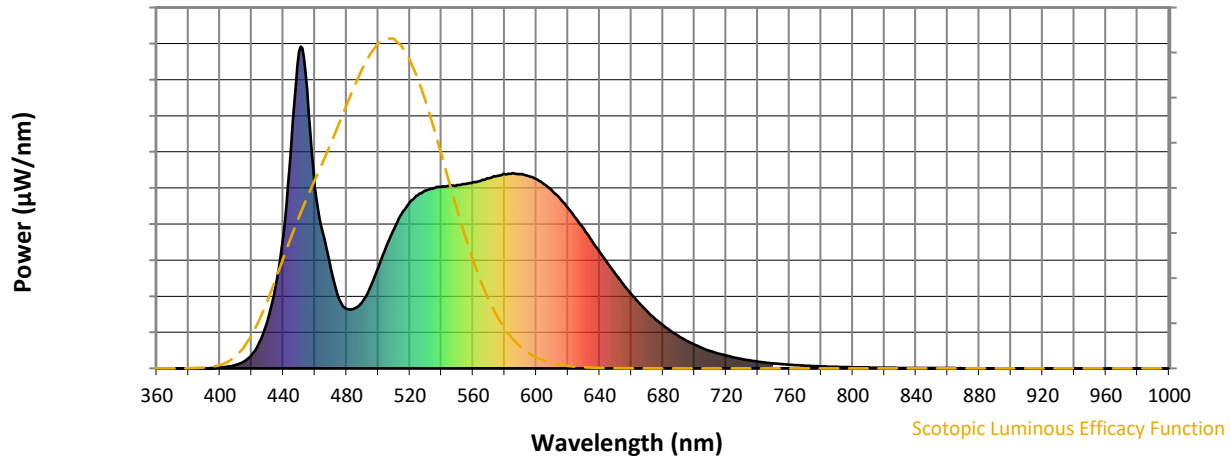


Photopic Lumens: NR

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	207	NR	620	498	NR	750	15	NR	880	0	NR
365	0	NR	495	252	NR	625	467	NR	755	13	NR	885	0	NR
370	0	NR	500	313	NR	630	433	NR	760	11	NR	890	0	NR
375	0	NR	505	378	NR	635	397	NR	765	10	NR	895	0	NR
380	0	NR	510	433	NR	640	362	NR	770	8	NR	900	0	NR
385	0	NR	515	481	NR	645	327	NR	775	7	NR	905	0	NR
390	0	NR	520	516	NR	650	293	NR	780	6	NR	910	0	NR
395	1	NR	525	538	NR	655	261	NR	785	5	NR	915	0	NR
400	3	NR	530	553	NR	660	231	NR	790	5	NR	920	0	NR
405	6	NR	535	560	NR	665	203	NR	795	4	NR	925	0	NR
410	11	NR	540	564	NR	670	177	NR	800	3	NR	930	0	NR
415	21	NR	545	568	NR	675	154	NR	805	3	NR	935	0	NR
420	42	NR	550	570	NR	680	134	NR	810	3	NR	940	0	NR
425	82	NR	555	573	NR	685	116	NR	815	2	NR	945	0	NR
430	146	NR	560	579	NR	690	100	NR	820	2	NR	950	0	NR
435	253	NR	565	584	NR	695	86	NR	825	2	NR	955	0	NR
440	414	NR	570	591	NR	700	73	NR	830	1	NR	960	0	NR
445	689	NR	575	598	NR	705	63	NR	835	1	NR	965	0	NR
450	986	NR	580	604	NR	710	54	NR	840	1	NR	970	0	NR
455	868	NR	585	607	NR	715	46	NR	845	1	NR	975	0	NR
460	563	NR	590	604	NR	720	40	NR	850	1	NR	980	0	NR
465	421	NR	595	598	NR	725	34	NR	855	1	NR	985	0	NR
470	311	NR	600	588	NR	730	29	NR	860	1	NR	990	0	NR
475	218	NR	605	572	NR	735	25	NR	865	1	NR	995	0	NR
480	185	NR	610	552	NR	740	21	NR	870	0	NR	1000	0	NR
485	186	NR	615	527	NR	745	18	NR	875	0	NR			

REPORT NUMBER: SP1-2405-118-3

Scotopic Flux vs. Wavelength



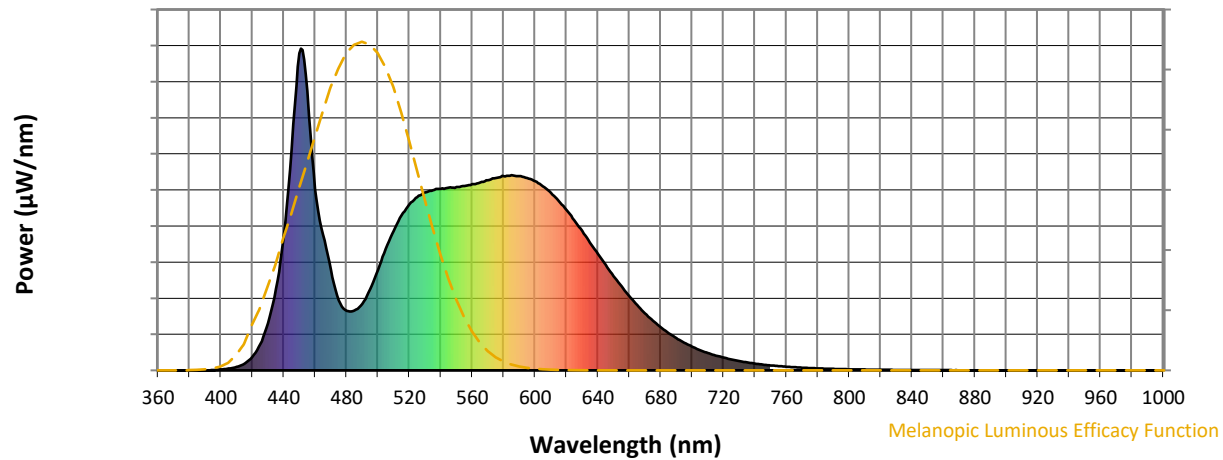
Scotopic Lumens: NR

S/P: 1.88

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	207	NR	620	498	NR	750	15	NR	880	0	NR
365	0	NR	495	252	NR	625	467	NR	755	13	NR	885	0	NR
370	0	NR	500	313	NR	630	433	NR	760	11	NR	890	0	NR
375	0	NR	505	378	NR	635	397	NR	765	10	NR	895	0	NR
380	0	NR	510	433	NR	640	362	NR	770	8	NR	900	0	NR
385	0	NR	515	481	NR	645	327	NR	775	7	NR	905	0	NR
390	0	NR	520	516	NR	650	293	NR	780	6	NR	910	0	NR
395	1	NR	525	538	NR	655	261	NR	785	5	NR	915	0	NR
400	3	NR	530	553	NR	660	231	NR	790	5	NR	920	0	NR
405	6	NR	535	560	NR	665	203	NR	795	4	NR	925	0	NR
410	11	NR	540	564	NR	670	177	NR	800	3	NR	930	0	NR
415	21	NR	545	568	NR	675	154	NR	805	3	NR	935	0	NR
420	42	NR	550	570	NR	680	134	NR	810	3	NR	940	0	NR
425	82	NR	555	573	NR	685	116	NR	815	2	NR	945	0	NR
430	146	NR	560	579	NR	690	100	NR	820	2	NR	950	0	NR
435	253	NR	565	584	NR	695	86	NR	825	2	NR	955	0	NR
440	414	NR	570	591	NR	700	73	NR	830	1	NR	960	0	NR
445	689	NR	575	598	NR	705	63	NR	835	1	NR	965	0	NR
450	986	NR	580	604	NR	710	54	NR	840	1	NR	970	0	NR
455	868	NR	585	607	NR	715	46	NR	845	1	NR	975	0	NR
460	563	NR	590	604	NR	720	40	NR	850	1	NR	980	0	NR
465	421	NR	595	598	NR	725	34	NR	855	1	NR	985	0	NR
470	311	NR	600	588	NR	730	29	NR	860	1	NR	990	0	NR
475	218	NR	605	572	NR	735	25	NR	865	1	NR	995	0	NR
480	185	NR	610	552	NR	740	21	NR	870	0	NR	1000	0	NR
485	186	NR	615	527	NR	745	18	NR	875	0	NR			

REPORT NUMBER: SP1-2405-118-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.92

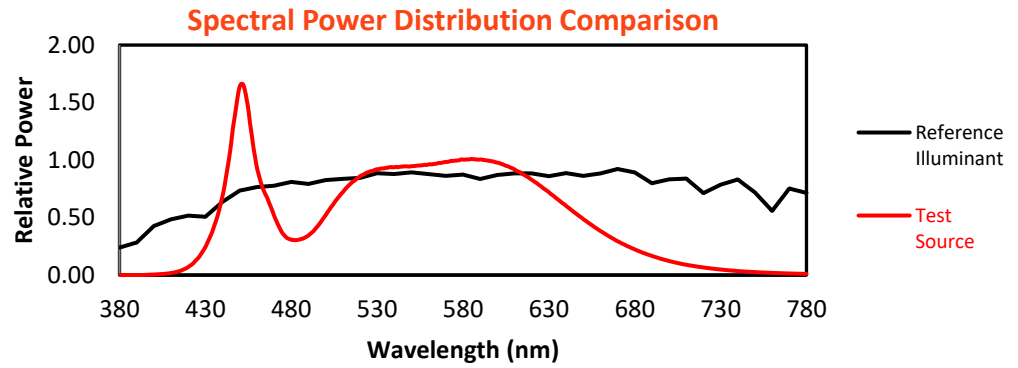
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	207	NR	620	498	NR	750	15	NR	880	0	NR
365	0	NR	495	252	NR	625	467	NR	755	13	NR	885	0	NR
370	0	NR	500	313	NR	630	433	NR	760	11	NR	890	0	NR
375	0	NR	505	378	NR	635	397	NR	765	10	NR	895	0	NR
380	0	NR	510	433	NR	640	362	NR	770	8	NR	900	0	NR
385	0	NR	515	481	NR	645	327	NR	775	7	NR	905	0	NR
390	0	NR	520	516	NR	650	293	NR	780	6	NR	910	0	NR
395	1	NR	525	538	NR	655	261	NR	785	5	NR	915	0	NR
400	3	NR	530	553	NR	660	231	NR	790	5	NR	920	0	NR
405	6	NR	535	560	NR	665	203	NR	795	4	NR	925	0	NR
410	11	NR	540	564	NR	670	177	NR	800	3	NR	930	0	NR
415	21	NR	545	568	NR	675	154	NR	805	3	NR	935	0	NR
420	42	NR	550	570	NR	680	134	NR	810	3	NR	940	0	NR
425	82	NR	555	573	NR	685	116	NR	815	2	NR	945	0	NR
430	146	NR	560	579	NR	690	100	NR	820	2	NR	950	0	NR
435	253	NR	565	584	NR	695	86	NR	825	2	NR	955	0	NR
440	414	NR	570	591	NR	700	73	NR	830	1	NR	960	0	NR
445	689	NR	575	598	NR	705	63	NR	835	1	NR	965	0	NR
450	986	NR	580	604	NR	710	54	NR	840	1	NR	970	0	NR
455	868	NR	585	607	NR	715	46	NR	845	1	NR	975	0	NR
460	563	NR	590	604	NR	720	40	NR	850	1	NR	980	0	NR
465	421	NR	595	598	NR	725	34	NR	855	1	NR	985	0	NR
470	311	NR	600	588	NR	730	29	NR	860	1	NR	990	0	NR
475	218	NR	605	572	NR	735	25	NR	865	1	NR	995	0	NR
480	185	NR	610	552	NR	740	21	NR	870	0	NR	1000	0	NR
485	186	NR	615	527	NR	745	18	NR	875	0	NR			

REPORT NUMBER: SP1-2405-118-3

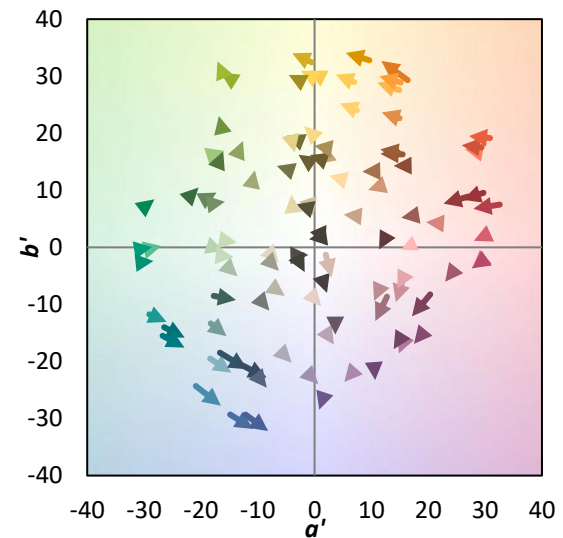
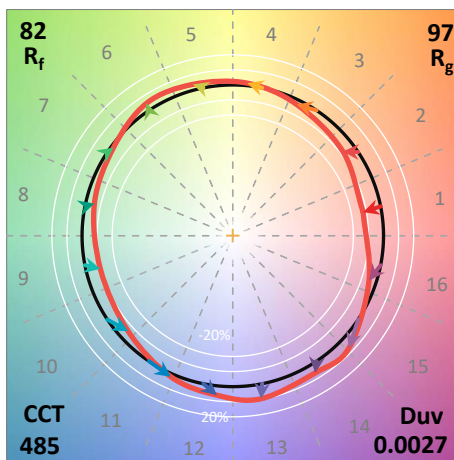
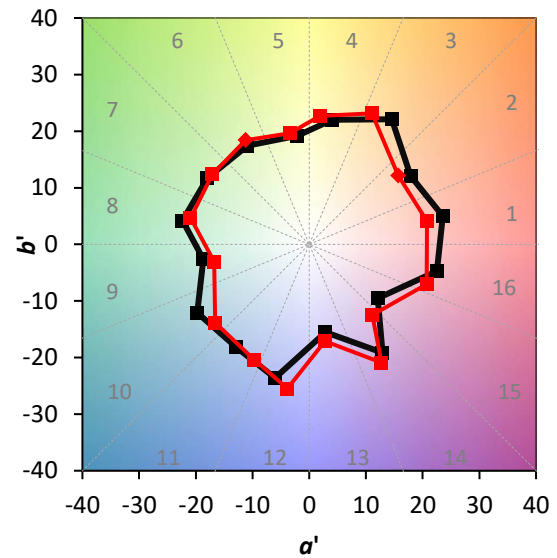
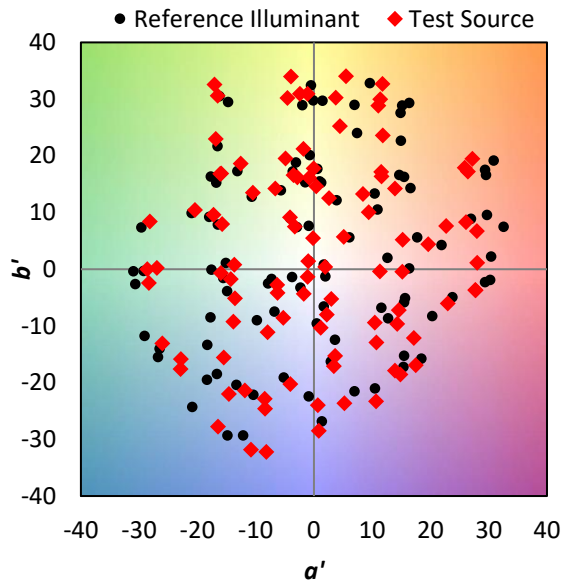
TM-30-18

Summary

$R_f = 82.4$
 $R_g = 96.8$
 $CIE R_a = 81.9$
 $R_9 = 8.5$

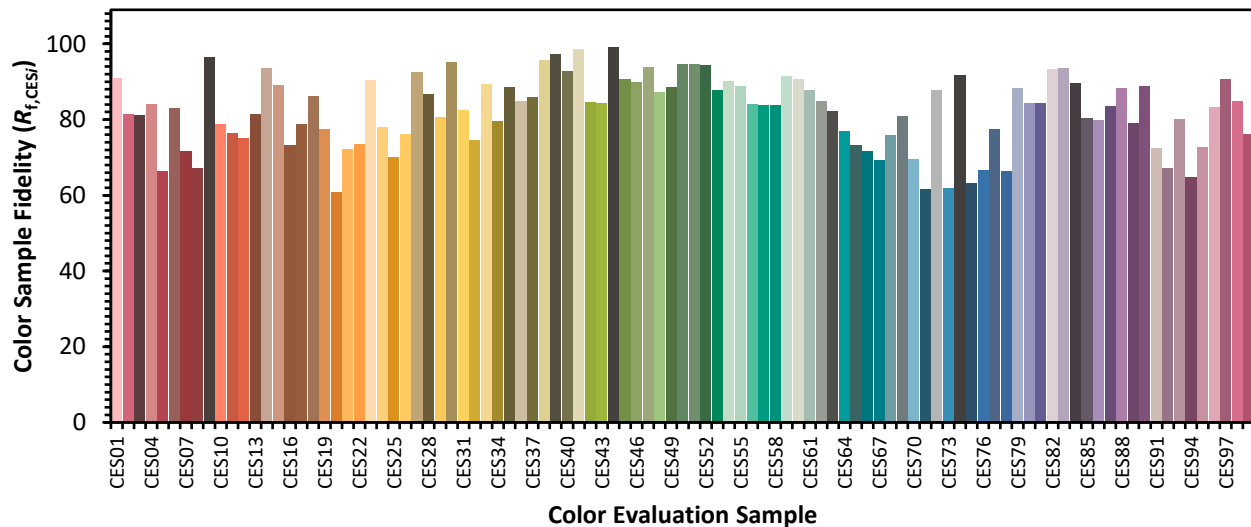


Color Vector Graphics

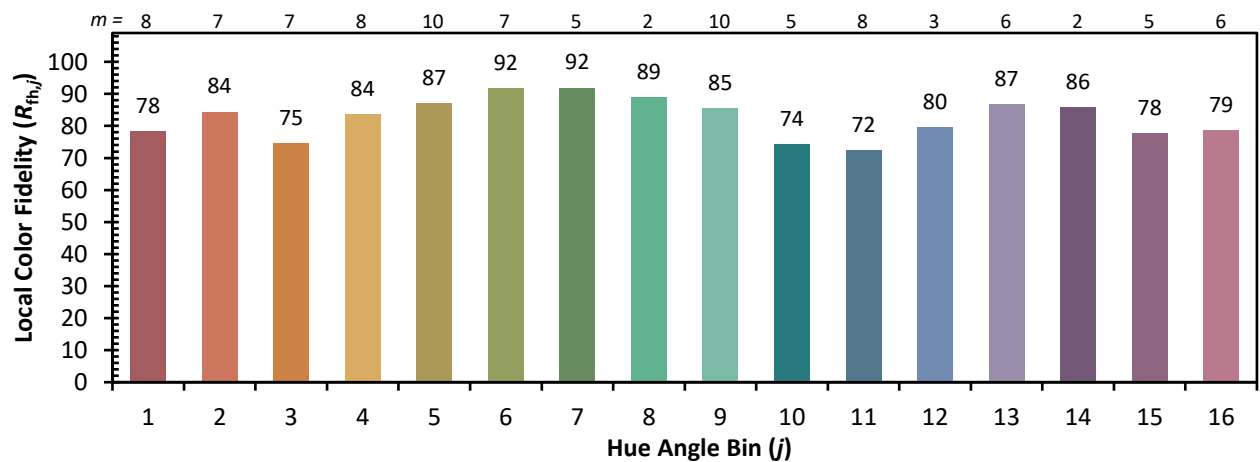
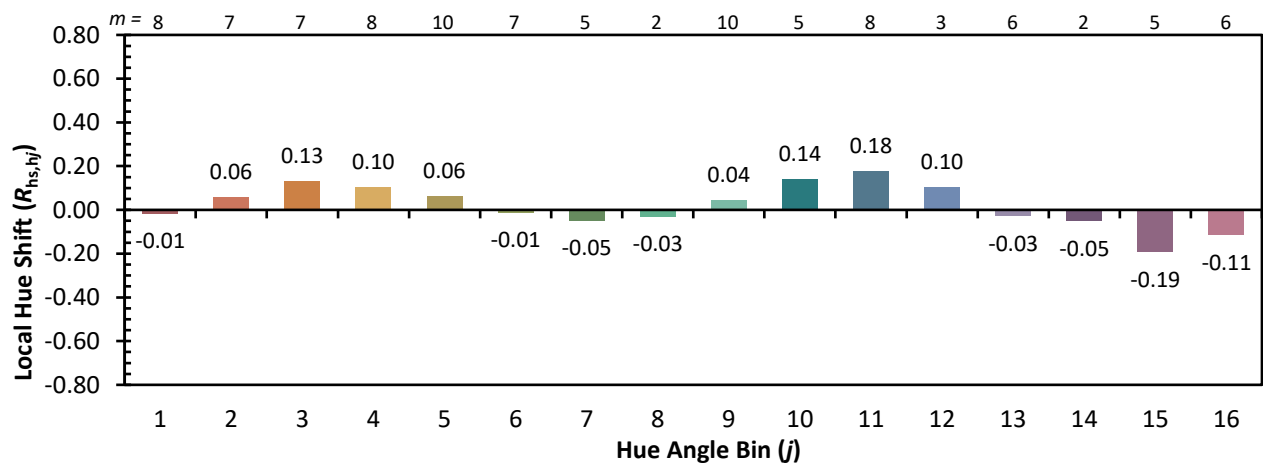
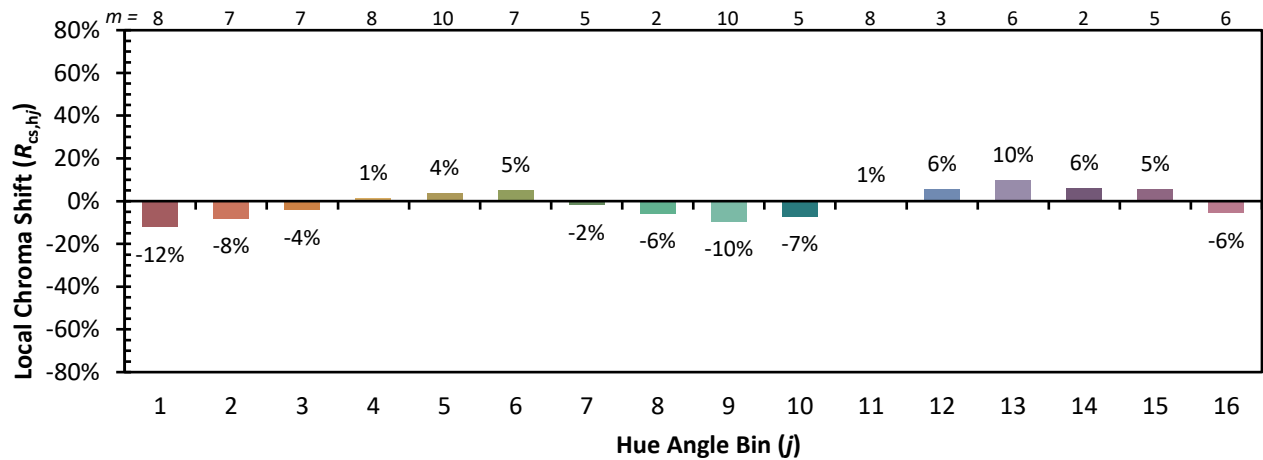


Individual Sample Fidelity Index ($R_{f,i}$)

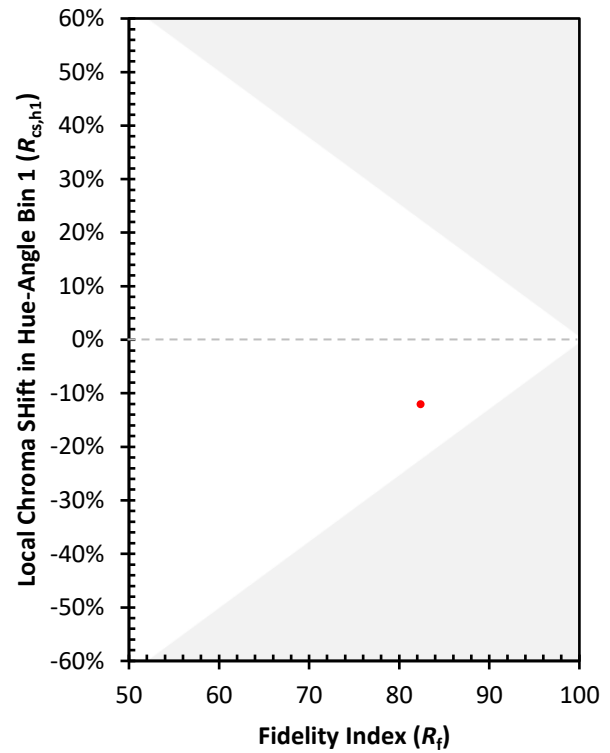
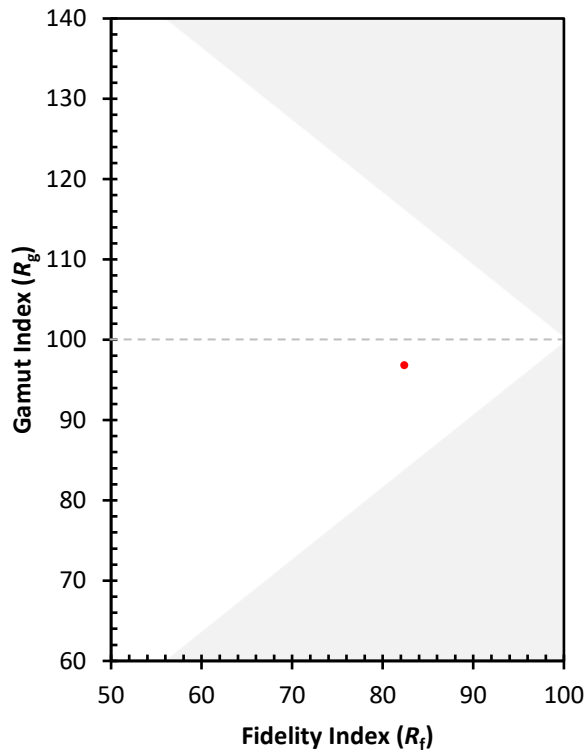
CES01 = 85	CES26 = 76	CES51 = 95	CES76 = 67
CES02 = 60	CES27 = 92	CES52 = 94	CES77 = 77
CES03 = 30	CES28 = 87	CES53 = 88	CES78 = 66
CES04 = 69	CES29 = 81	CES54 = 90	CES79 = 88
CES05 = 47	CES30 = 95	CES55 = 89	CES80 = 84
CES06 = 50	CES31 = 82	CES56 = 84	CES81 = 84
CES07 = 40	CES32 = 74	CES57 = 84	CES82 = 93
CES08 = 39	CES33 = 89	CES58 = 84	CES83 = 94
CES09 = 29	CES34 = 80	CES59 = 91	CES84 = 90
CES10 = 73	CES35 = 88	CES60 = 91	CES85 = 80
CES11 = 56	CES36 = 85	CES61 = 88	CES86 = 80
CES12 = 62	CES37 = 86	CES62 = 85	CES87 = 83
CES13 = 42	CES38 = 96	CES63 = 82	CES88 = 88
CES14 = 74	CES39 = 97	CES64 = 77	CES89 = 79
CES15 = 71	CES40 = 93	CES65 = 73	CES90 = 89
CES16 = 46	CES41 = 99	CES66 = 72	CES91 = 73
CES17 = 49	CES42 = 85	CES67 = 69	CES92 = 67
CES18 = 56	CES43 = 84	CES68 = 76	CES93 = 80
CES19 = 71	CES44 = 99	CES69 = 81	CES94 = 65
CES20 = 64	CES45 = 91	CES70 = 70	CES95 = 73
CES21 = 85	CES46 = 90	CES71 = 62	CES96 = 83
CES22 = 77	CES47 = 94	CES72 = 88	CES97 = 91
CES23 = 91	CES48 = 87	CES73 = 62	CES98 = 85
CES24 = 90	CES49 = 88	CES74 = 92	CES99 = 76
CES25 = 71	CES50 = 95	CES75 = 63	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)