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: McGRAW-EDISON

Report Number: P406356

Luminaire Tested: **TT-D2-740-U-MQ-UPL**

Issue Date: 7/23/2020

Report Generated By E9812814

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:	P406356
	REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G2-2002-677-1) AND
Test Lab:	INNOVATION CENTER
Issue Date:	7/23/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TT-D2-740-U-MQ-UPL
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
	4000K, 70 CRI LEDS AND MEDIUM DISTRIBUTION
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	6464.7 lumens
Efficiency:	N/A
Efficacy:	137.0 lumens/watt
Luminous Opening:	Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification:	Type V - Short - Non-Cutoff
BUG Rating:	B2 - U4 - G2

Input Watts (W):	47.2
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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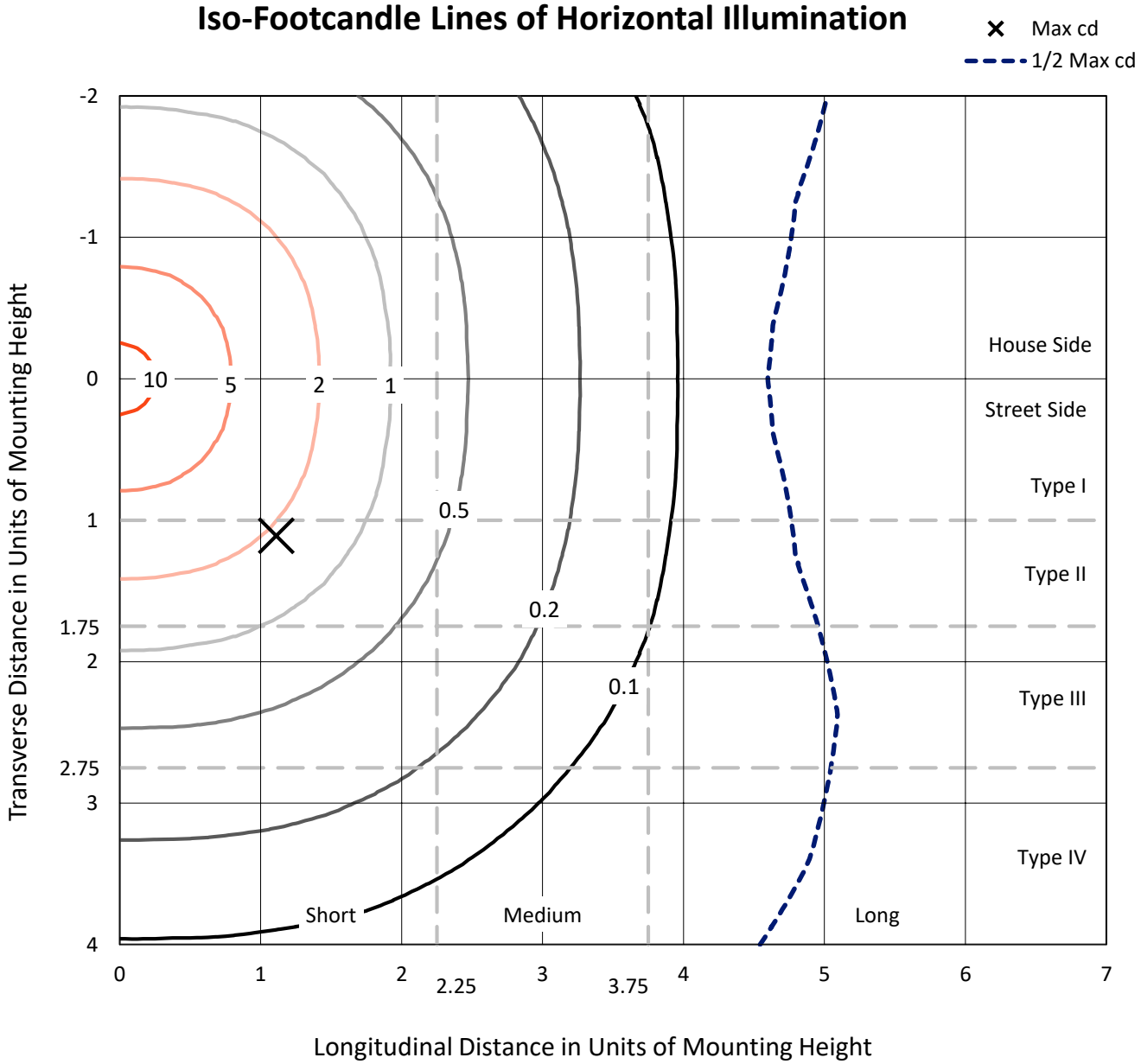
Scaled Data Report

REPORT NUMBER: P406356
CATALOG NUMBER: TT-D2-740-U-MQ-UPL

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 11.1 fc
Type V - Short - Non-Cutoff

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REPORT NUMBER: P406356
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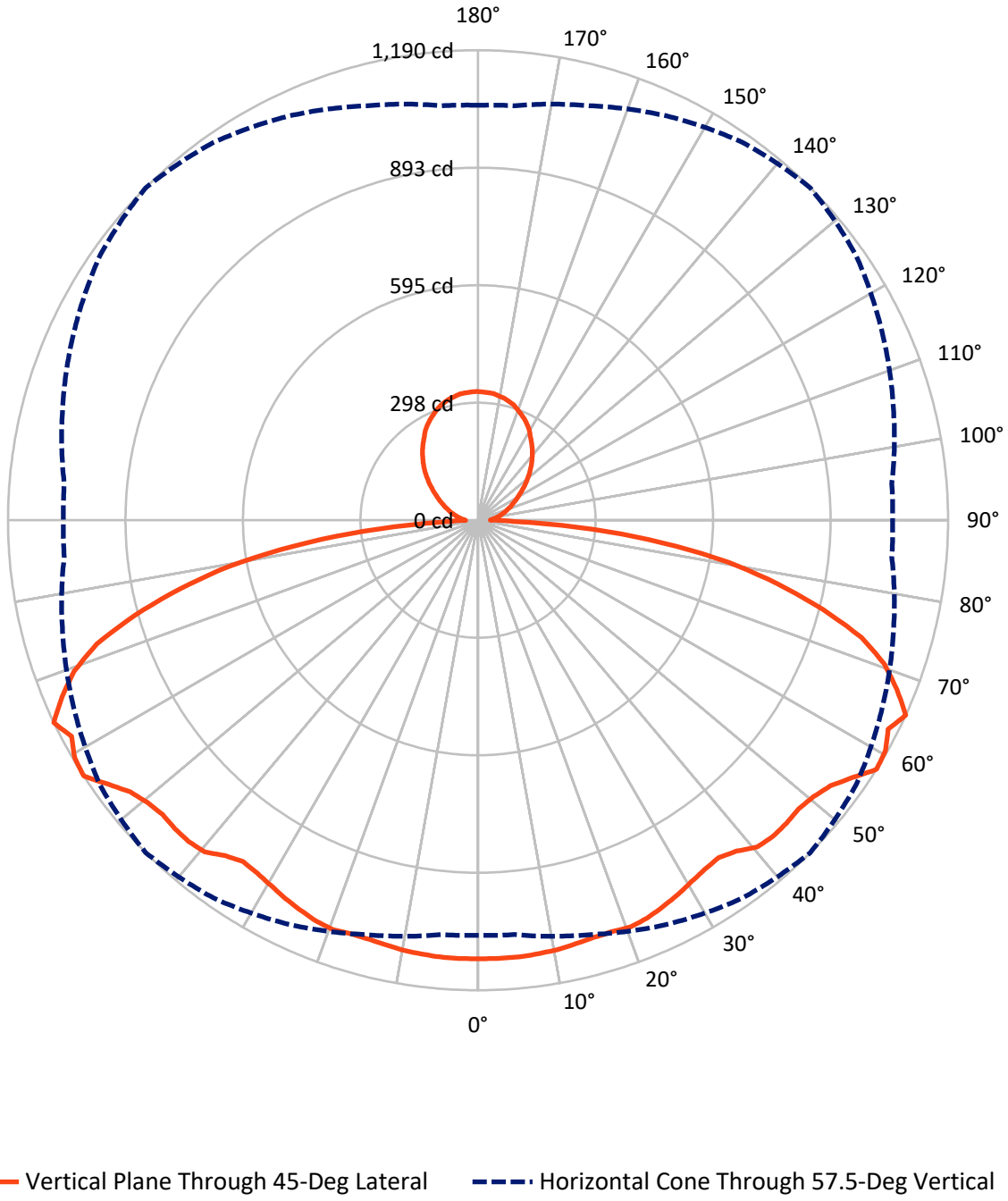
Luminous Intensity Polar Plot



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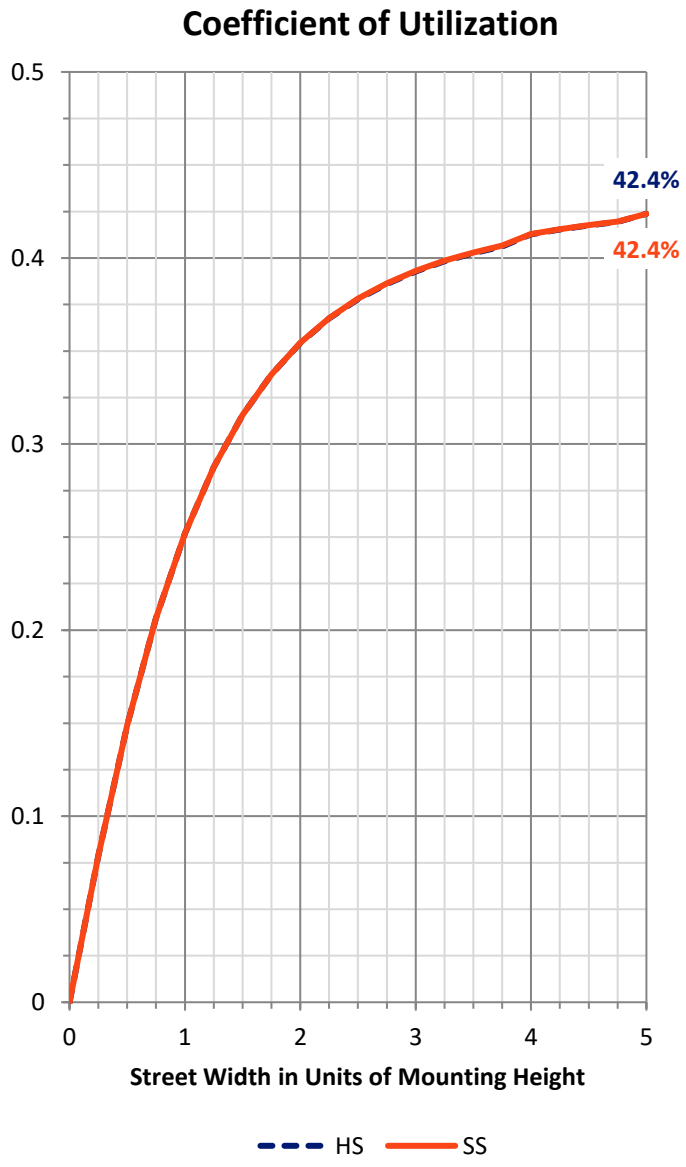
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2789.6	442.7	3232.4
	% Fixture	43.2	6.8	50.0
Street Side	Lumens	2789.6	442.7	3232.4
	% Fixture	43.2	6.8	50.0
Total	Lumens	5579.3	885.5	6464.7
	% Fixture	86.3	13.7	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.8	1.6
10°-20°	311.2	4.8
20°-30°	500.1	7.7
30°-40°	660.2	10.2
40°-50°	826.0	12.8
50°-60°	982.4	15.2
60°-70°	1065.5	16.5
70°-80°	848.1	13.1
80°-90°	280.0	4.3
90°-100°	45.4	0.7
100°-110°	70.3	1.1
110°-120°	97.7	1.5
120°-130°	126.6	2.0
130°-140°	147.6	2.3
140°-150°	149.5	2.3
150°-160°	129.8	2.0
160°-170°	87.7	1.4
170°-180°	30.8	0.5
0°-90°	5579.3	86.3
0°-180°	6464.7	100.0



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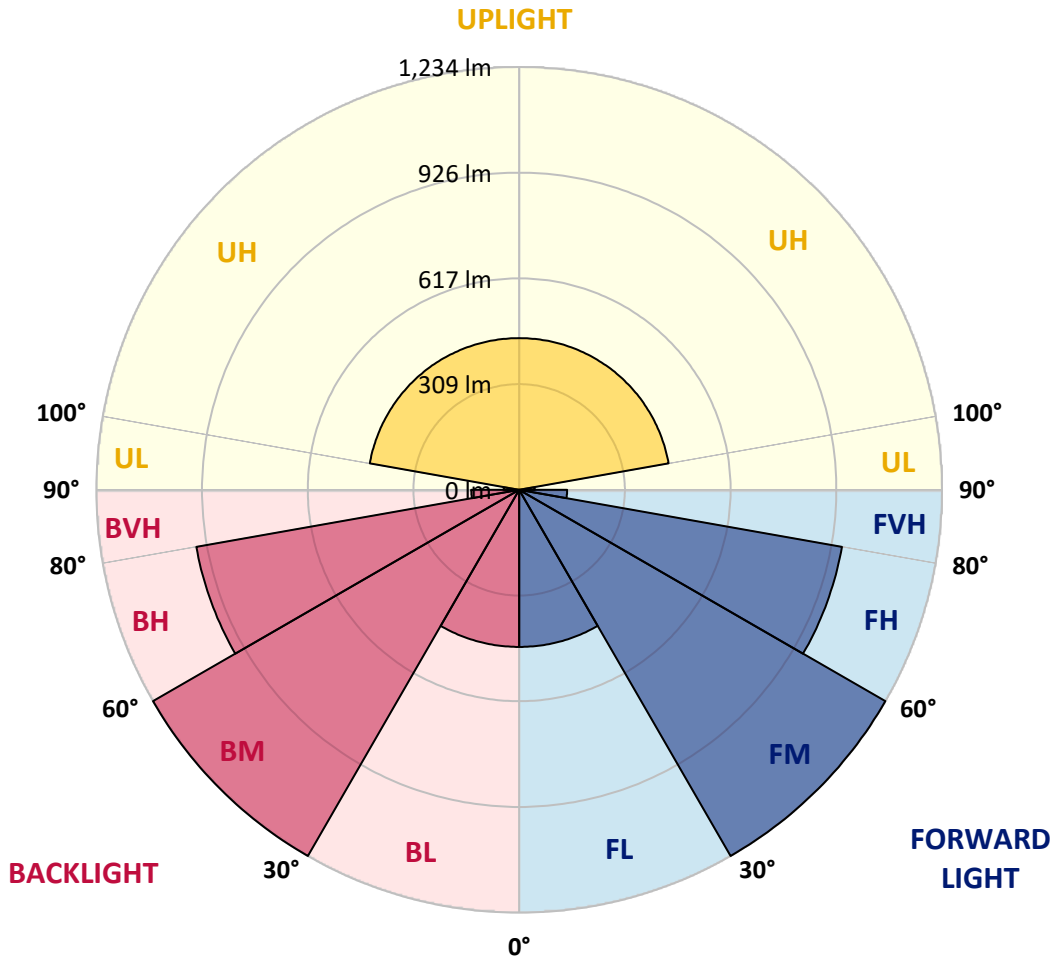
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	458.5	7.1			
FM	(30°-60°)	1234.3	19.1			
FH	(60°-80°)	956.8	14.8			G1/1800
FVH	(80°-90°)	140.0	2.2			G2/225
BL	(0°-30°)	458.5	7.1	B1/500		
BM	(30°-60°)	1234.3	19.1	B2/2500		
BH	(60°-80°)	956.8	14.8	B2/1000		G1/1800
BVH	(80°-90°)	140.0	2.2			G2/225
UL	(90°-100°)	45.4	0.7		U2/50	
UH	(100°-180°)	442.7	6.8		U3/500	

BUG Rating: B2-U4-G2
Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4
2.5°	1112.0	1111.2	1112.0	1111.2	1111.2	1110.4	1111.2	1111.2	1111.2	1111.2	1111.2
5°	1111.2	1110.4	1110.4	1111.2	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4
7.5°	1107.9	1107.9	1108.7	1107.9	1107.9	1107.9	1107.9	1107.9	1107.9	1108.7	1108.7
10°	1105.4	1104.6	1105.4	1105.4	1104.6	1105.4	1104.6	1105.4	1105.4	1105.4	1105.4
12.5°	1102.1	1101.2	1102.1	1102.1	1101.2	1100.4	1101.2	1101.2	1102.1	1102.1	1102.1
15°	1096.3	1096.3	1097.9	1097.1	1097.1	1096.3	1097.9	1097.1	1096.3	1097.1	1097.1
17.5°	1092.1	1092.1	1093.8	1095.4	1095.4	1095.4	1095.4	1094.6	1093.0	1093.8	1092.1
20°	1093.0	1093.8	1094.6	1097.1	1098.8	1099.6	1099.6	1097.1	1094.6	1095.4	1094.6
22.5°	1090.5	1089.6	1090.5	1092.1	1094.6	1094.6	1094.6	1091.3	1090.5	1089.6	1089.6
25°	1080.5	1080.5	1082.2	1083.8	1085.5	1084.7	1085.5	1083.8	1082.2	1080.5	1080.5
27.5°	1068.9	1068.9	1071.4	1073.1	1074.7	1074.7	1073.9	1072.2	1071.4	1069.7	1068.9
30°	1057.3	1057.3	1059.8	1061.4	1063.9	1063.1	1063.1	1060.6	1058.1	1056.5	1056.5
32.5°	1044.9	1044.0	1046.5	1050.7	1054.0	1054.0	1054.0	1049.0	1045.7	1044.0	1043.2
35°	1034.1	1034.1	1037.4	1044.9	1049.0	1049.0	1047.3	1044.0	1036.6	1034.1	1034.1
37.5°	1030.8	1033.2	1042.4	1053.1	1061.4	1063.1	1060.6	1051.5	1041.5	1034.1	1031.6
40°	1041.5	1044.0	1055.6	1073.1	1085.5	1088.0	1085.5	1072.2	1054.8	1043.2	1042.4
42.5°	1043.2	1044.9	1059.0	1078.9	1090.5	1094.6	1090.5	1077.2	1058.1	1044.0	1043.2
45°	1037.4	1038.2	1054.8	1075.5	1089.6	1094.6	1089.6	1073.9	1054.0	1038.2	1037.4
47.5°	1029.9	1031.6	1049.8	1071.4	1088.8	1092.1	1088.0	1070.6	1048.2	1032.4	1029.9
50°	1024.1	1029.1	1045.7	1069.7	1090.5	1100.4	1090.5	1067.2	1044.9	1027.4	1024.1
52.5°	1027.4	1029.1	1050.7	1084.7	1112.9	1117.0	1112.0	1084.7	1049.0	1029.1	1026.6
55°	1037.4	1044.9	1068.1	1117.0	1142.7	1150.2	1139.4	1115.3	1068.9	1044.9	1037.4
57.5°	1050.7	1053.1	1086.3	1129.4	1167.6	1190.0	1168.4	1128.6	1088.8	1051.5	1049.8
60°	1039.9	1032.4	1073.9	1124.5	1175.9	1185.0	1172.6	1125.3	1072.2	1031.6	1039.1
62.5°	1010.9	1015.8	1049.8	1119.5	1155.1	1165.1	1151.8	1119.5	1048.2	1020.0	1008.4
65°	987.6	1017.5	1054.8	1104.6	1161.8	1190.0	1162.6	1102.9	1056.5	1012.5	985.2
67.5°	955.3	961.1	1016.7	1078.0	1129.4	1143.5	1128.6	1078.9	1011.7	957.0	961.1
70°	900.6	892.3	948.7	1020.0	1068.9	1091.3	1070.6	1016.7	946.2	890.6	898.1
72.5°	810.2	815.2	867.4	942.9	993.4	1015.0	994.3	937.1	865.7	820.1	815.2
75°	715.6	721.4	772.0	840.9	892.3	901.4	895.6	836.7	773.7	720.6	715.6
77.5°	607.8	613.6	655.1	730.6	761.3	775.4	762.9	734.7	653.5	612.8	606.2
80°	488.4	486.8	523.3	587.9	626.1	641.8	626.1	589.6	521.6	490.1	479.3
82.5°	349.1	350.8	384.8	429.6	466.0	471.0	463.6	433.7	381.5	354.9	340.0
85°	194.0	201.5	226.4	259.6	283.6	291.9	279.5	251.3	225.6	204.8	198.2
87.5°	46.4	50.6	58.9	74.6	83.8	92.0	83.8	77.9	55.6	50.6	46.4
90°	32.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
92.5°	37.0	37.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
95°	42.0	42.0	42.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
97.5°	48.0	48.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
100°	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
102.5°	60.0	59.0	60.0	60.0	59.0	59.0	59.0	60.0	60.0	60.0	59.0
105°	66.0	66.0	66.0	66.0	66.0	66.0	66.0	67.0	66.0	66.0	66.0
107.5°	73.0	73.0	73.0	74.0	74.0	74.0	74.0	74.0	73.0	74.0	73.0
110°	80.0	80.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0

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Scaled Data Report

REPORT NUMBER: P406356
CATALOG NUMBER: TT-D2-740-U-MQ-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	89.0	89.0	89.0	89.0	89.0	*90.0*	90.0	90.0	90.0	90.0	89.0
115°	97.0	97.0	98.0	98.0	98.0	*98.0*	99.0	99.0	98.0	98.0	98.0
117.5°	107.0	107.0	107.0	107.0	107.0	*108.0*	108.0	108.0	108.0	108.0	107.0
120°	117.0	117.0	117.0	118.0	118.0	*118.0*	119.0	119.0	118.0	118.0	118.0
122.5°	129.0	128.0	129.0	129.0	129.0	*129.0*	130.0	130.0	130.0	130.0	129.0
125°	140.0	140.0	141.0	141.0	141.0	*141.0*	142.0	142.0	142.0	142.0	141.0
127.5°	153.0	153.0	153.0	153.0	153.0	*154.0*	154.0	154.0	154.0	154.0	154.0
130°	165.0	165.0	166.0	166.0	166.0	*166.0*	167.0	167.0	167.0	167.0	166.0
132.5°	179.0	178.0	179.0	178.0	178.0	*179.0*	179.0	180.0	179.0	180.0	179.0
135°	191.0	191.0	191.0	191.0	191.0	*192.0*	192.0	192.0	192.0	192.0	192.0
137.5°	204.0	203.0	204.0	203.0	203.0	*204.0*	204.0	204.0	204.0	204.0	204.0
140°	216.0	215.0	216.0	215.0	216.0	*216.0*	216.0	216.0	216.0	216.0	216.0
142.5°	228.0	227.0	228.0	227.0	227.0	*228.0*	228.0	228.0	228.0	228.0	228.0
145°	239.0	239.0	239.0	238.0	239.0	*239.0*	239.0	239.0	239.0	239.0	239.0
147.5°	250.0	249.0	250.0	249.0	249.0	*250.0*	250.0	250.0	250.0	250.0	250.0
150°	263.0	262.0	263.0	262.0	263.0	*263.0*	263.0	263.0	263.0	263.0	263.0
152.5°	273.0	273.0	273.0	273.0	273.0	*273.0*	273.0	273.0	273.0	273.0	273.0
155°	282.0	282.0	283.0	282.0	282.0	*282.0*	283.0	282.0	282.0	282.0	282.0
157.5°	290.0	290.0	290.0	290.0	290.0	*290.0*	291.0	291.0	290.0	291.0	290.0
160°	298.0	298.0	299.0	298.0	298.0	*298.0*	299.0	298.0	298.0	298.0	298.0
162.5°	306.0	305.0	306.0	305.0	306.0	*306.0*	306.0	306.0	306.0	306.0	306.0
165°	311.0	311.0	312.0	311.0	311.0	*311.0*	312.0	311.0	311.0	311.0	311.0
167.5°	316.0	315.0	316.0	316.0	316.0	*316.0*	316.0	316.0	316.0	316.0	316.0
170°	319.0	319.0	320.0	319.0	319.0	*319.0*	320.0	319.0	319.0	319.0	319.0
172.5°	323.0	323.0	323.0	323.0	323.0	*323.0*	323.0	323.0	323.0	323.0	323.0
175°	324.0	324.0	325.0	324.0	325.0	*324.0*	325.0	324.0	324.0	324.0	324.0
177.5°	325.0	325.0	326.0	325.0	325.0	*325.0*	325.0	325.0	325.0	325.0	325.0
180°	326.0	326.0	326.0	326.0	326.0	*326.0*	326.0	326.0	326.0	326.0	326.0

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LM-79-08: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

McGRAW-EDISON

Report Number: SP1-2006-844-6

Luminaire Tested: TT-D2-740-U-RW

Test Date: 06/30/2020

Data applicable to product families TT-x-740 and TTN-x-740

Report Generated By controller / USPTCWHP6086842

Test Information

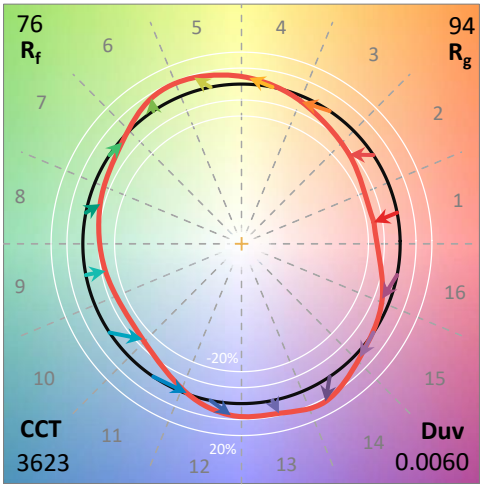
Test Method:	LM-79-08
Report Number:	SP1-2006-844-6
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1
Measurement Geometry:	4π
Issue Date:	06/30/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	**TT-D2-740-U-RW**
Description:	MCGRAW EDISON

RECTANGULAR DISTRIBUTION

Spectral Parameters

CCT (K):	3623	CRI (Ra):	72.6		
CIE u':	0.2297	R1:	69.4	R9:	-22.4
CIE v':	0.5166	R2:	78.4	R10:	49.0
Duv:	0.0060	R3:	86.1	R11:	67.4
CIE x:	0.4044	R4:	72.3	R12:	39.3
CIE y:	0.4042	R5:	68.2	R13:	70.5
CIE z:	0.1914	R6:	69.2	R14:	91.9
Peak Wavelength (nm):	588	R7:	83.0		
Dominant Wavelength (nm):	578	R8:	54.2		
Purity:	42.8				

Rf:	76.2
Rg:	94.3



Test Conditions

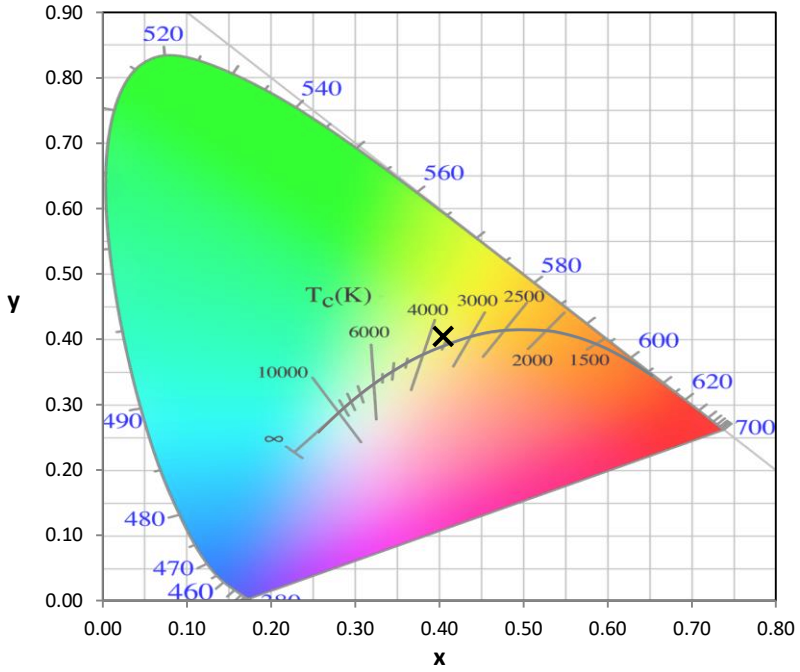
Stabilization Time:	207M
Operation Time:	12H
Room Temperature (°C) / RH%:	25.9/42%
Sphere Temperature (°C):	25.8

REPORT NUMBER: SP1-2006-844-6

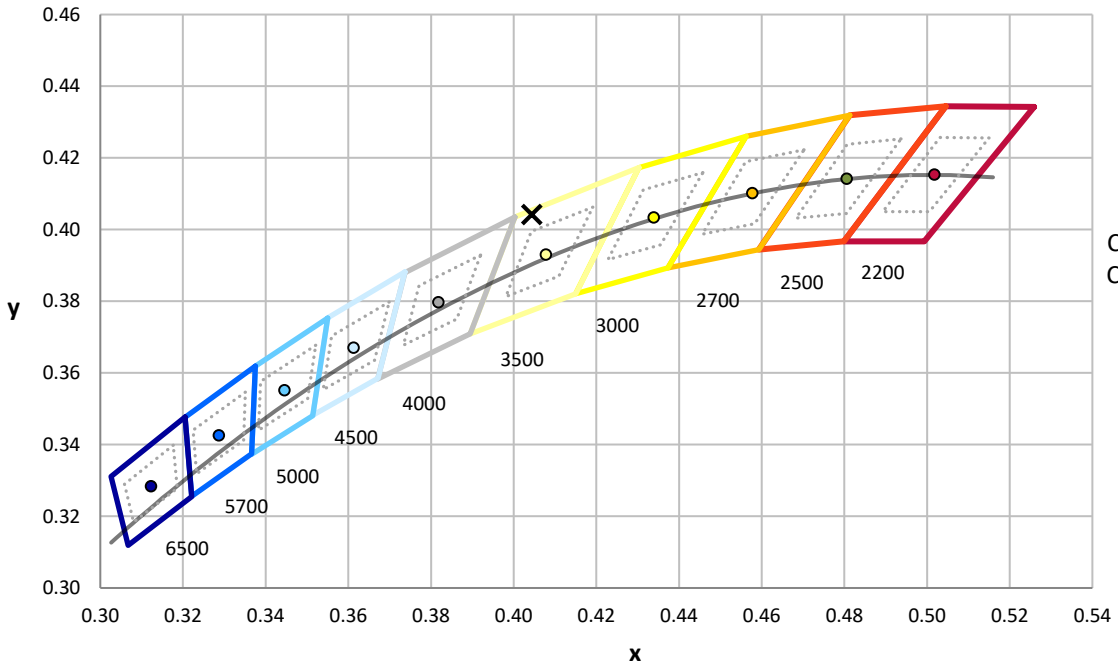
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	7/29/2020	1/29/2021
Power Meter	IN0071	12/3/2019	12/3/2020
AC Power Source	IN0063	12/3/2019	12/3/2020
DC Power Source	IN0208	12/3/2019	12/3/2020
Sphere Thermometer	IN0085	12/3/2019	12/3/2020
Room Thermometer	IN0046	12/3/2019	12/3/2020

REPORT NUMBER: SP1-2006-844-6

CIE 1931 Chromaticity Diagram



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

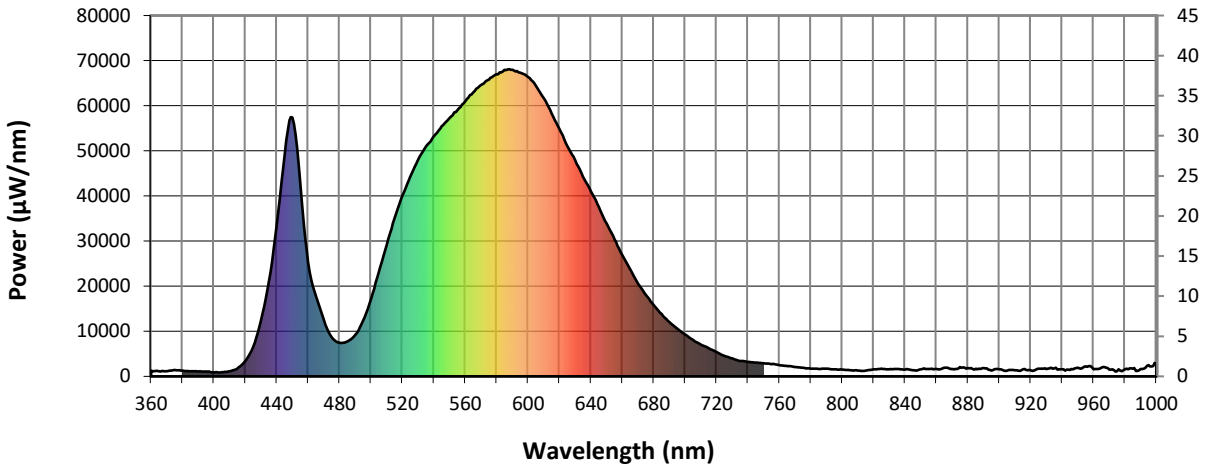


CCT = 3623K
CIE x = 0.4044
CIE y = 0.4042
Duv = 0.0060

Point lies inside the ANSI 3500K 7-step quadrangle

REPORT NUMBER: SP1-2006-844-6

Photopic Flux vs. Wavelength



######

λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)
360	1254	0.0	490	9219	1.3	620	54761	14.3	750	2901	0.0	880	1835	0.0
365	1158	0.0	495	12322	2.2	625	51064	11.3	755	2733	0.0	885	1690	0.0
370	1131	0.0	500	17160	3.8	630	47879	8.7	760	2503	0.0	890	1819	0.0
375	1414	0.0	505	23071	6.5	635	44248	6.6	765	2289	0.0	895	1314	0.0
380	1275	0.0	510	29162	10.0	640	41034	4.9	770	2078	0.0	900	1547	0.0
385	1122	0.0	515	34992	14.5	645	37515	3.6	775	1927	0.0	905	1281	0.0
390	1074	0.0	520	40102	19.4	650	33900	2.5	780	1724	0.0	910	1345	0.0
395	1058	0.0	525	44194	23.7	655	30384	1.7	785	1617	0.0	915	1561	0.0
400	885	0.0	530	48014	28.3	660	26883	1.1	790	1709	0.0	920	1368	0.0
405	912	0.0	535	51019	31.6	665	23703	0.8	795	1561	0.0	925	1730	0.0
410	1108	0.0	540	53190	34.7	670	20603	0.5	800	1525	0.0	930	1629	0.0
415	1763	0.0	545	55452	36.9	675	18039	0.3	805	1332	0.0	935	1796	0.0
420	3421	0.0	550	57280	38.9	680	15849	0.2	810	1269	0.0	940	1595	0.0
425	6610	0.0	555	59041	40.3	685	13806	0.1	815	1261	0.0	945	1410	0.0
430	12444	0.1	560	60976	41.4	690	12093	0.1	820	1551	0.0	950	1937	0.0
435	21116	0.2	565	62904	41.8	695	10566	0.0	825	1708	0.0	955	2186	0.0
440	33463	0.5	570	64555	42.0	700	9300	0.0	830	1592	0.0	960	1583	0.0
445	49089	1.0	575	65785	40.9	705	8110	0.0	835	1642	0.0	965	1953	0.0
450	57374	1.5	580	66948	39.8	710	7052	0.0	840	1514	0.0	970	1519	0.0
455	42663	1.4	585	67963	37.8	715	6233	0.0	845	1376	0.0	975	1168	0.0
460	25334	1.0	590	68001	35.2	720	5362	0.0	850	1592	0.0	980	1593	0.0
465	17751	0.9	595	67308	31.9	725	4563	0.0	855	1667	0.0	985	1722	0.0
470	12447	0.8	600	66343	28.6	730	3976	0.0	860	1662	0.0	990	1648	0.0
475	8641	0.7	605	64393	24.9	735	3424	0.0	865	1916	0.0	995	2495	0.0
480	7423	0.7	610	61634	21.2	740	3222	0.0	870	1655	0.0	1000	2643	0.0
485	7759	0.9	615	58349	17.6	745	3060	0.0	875	2036	0.0			

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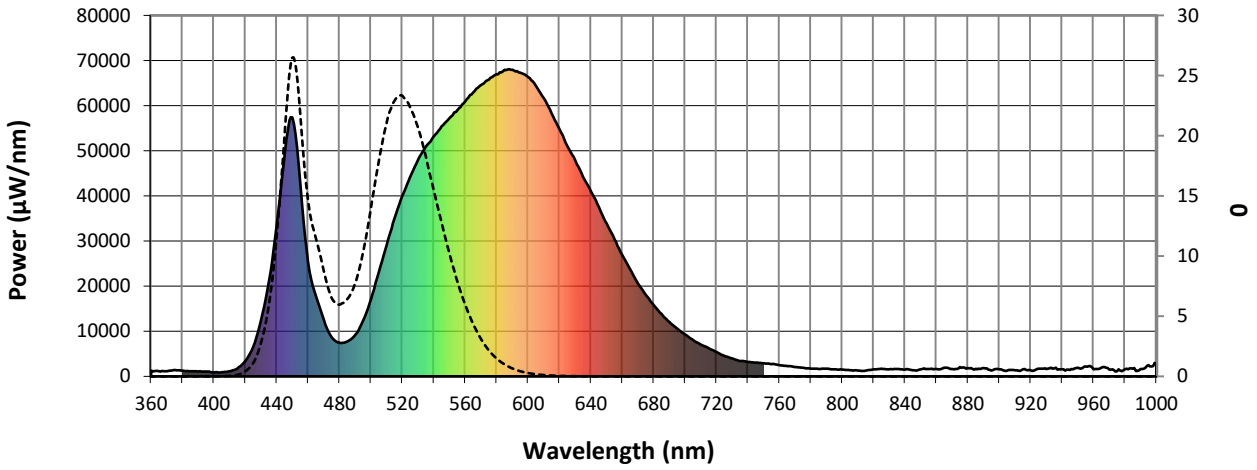
Scotopic Flux vs. Wavelength



Scotopic Lumens: 1941.7 **S/P: 0.51**

λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)
360	1254	0.0	490	9219	14.2	620	54761	0.7	750	2901	0.0	880	1835	0.0
365	1158	0.0	495	12322	19.9	625	51064	0.4	755	2733	0.0	885	1690	0.0
370	1131	0.0	500	17160	28.7	630	47879	0.3	760	2503	0.0	890	1819	0.0
375	1414	0.0	505	23071	39.2	635	44248	0.2	765	2289	0.0	895	1314	0.0
380	1275	0.0	510	29162	49.4	640	41034	0.1	770	2078	0.0	900	1547	0.0
385	1122	0.0	515	34992	58.0	645	37515	0.1	775	1927	0.0	905	1281	0.0
390	1074	0.0	520	40102	63.7	650	33900	0.0	780	1724	0.0	910	1345	0.0
395	1058	0.0	525	44194	66.1	655	30384	0.0	785	1617	0.0	915	1561	0.0
400	885	0.0	530	48014	66.2	660	26883	0.0	790	1709	0.0	920	1368	0.0
405	912	0.0	535	51019	63.6	665	23703	0.0	795	1561	0.0	925	1730	0.0
410	1108	0.1	540	53190	58.8	670	20603	0.0	800	1525	0.0	930	1629	0.0
415	1763	0.2	545	55452	53.2	675	18039	0.0	805	1332	0.0	935	1796	0.0
420	3421	0.6	550	57280	46.8	680	15849	0.0	810	1269	0.0	940	1595	0.0
425	6610	1.6	555	59041	40.3	685	13806	0.0	815	1261	0.0	945	1410	0.0
430	12444	4.2	560	60976	34.1	690	12093	0.0	820	1551	0.0	950	1937	0.0
435	21116	9.4	565	62904	28.2	695	10566	0.0	825	1708	0.0	955	2186	0.0
440	33463	18.7	570	64555	22.8	700	9300	0.0	830	1592	0.0	960	1583	0.0
445	49089	32.9	575	65785	17.9	705	8110	0.0	835	1642	0.0	965	1953	0.0
450	57374	44.5	580	66948	13.8	710	7052	0.0	840	1514	0.0	970	1519	0.0
455	42663	37.3	585	67963	10.4	715	6233	0.0	845	1376	0.0	975	1168	0.0
460	25334	24.5	590	68001	7.6	720	5362	0.0	850	1592	0.0	980	1593	0.0
465	17751	18.7	595	67308	5.4	725	4563	0.0	855	1667	0.0	985	1722	0.0
470	12447	14.3	600	66343	3.7	730	3976	0.0	860	1662	0.0	990	1648	0.0
475	8641	10.8	605	64393	2.5	735	3424	0.0	865	1916	0.0	995	2495	0.0
480	7423	10.0	610	61634	1.7	740	3222	0.0	870	1655	0.0	1000	2643	0.0
485	7759	11.2	615	58349	1.1	745	3060	0.0	875	2036	0.0			

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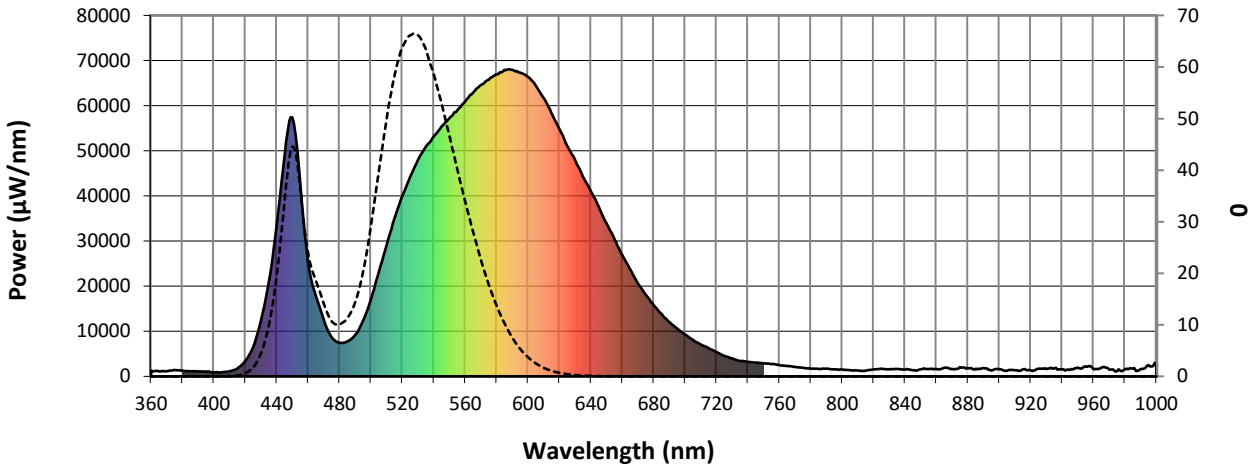
Melanopic Flux vs. Wavelength



Melanopic Lumens: 5289.9 **S/P: 1.39**

λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)
360	1254	0.0	490	9219	7.7	620	54761	0.0	750	2901	0.0	880	1835	0.0
365	1158	0.0	495	12322	10.2	625	51064	0.0	755	2733	0.0	885	1690	0.0
370	1131	0.0	500	17160	13.8	630	47879	0.0	760	2503	0.0	890	1819	0.0
375	1414	0.0	505	23071	17.7	635	44248	0.0	765	2289	0.0	895	1314	0.0
380	1275	0.0	510	29162	20.9	640	41034	0.0	770	2078	0.0	900	1547	0.0
385	1122	0.0	515	34992	22.9	645	37515	0.0	775	1927	0.0	905	1281	0.0
390	1074	0.0	520	40102	23.3	650	33900	0.0	780	1724	0.0	910	1345	0.0
395	1058	0.0	525	44194	22.4	655	30384	0.0	785	1617	0.0	915	1561	0.0
400	885	0.0	530	48014	20.7	660	26883	0.0	790	1709	0.0	920	1368	0.0
405	912	0.0	535	51019	18.4	665	23703	0.0	795	1561	0.0	925	1730	0.0
410	1108	0.0	540	53190	15.6	670	20603	0.0	800	1525	0.0	930	1629	0.0
415	1763	0.1	545	55452	12.9	675	18039	0.0	805	1332	0.0	935	1796	0.0
420	3421	0.4	550	57280	10.3	680	15849	0.0	810	1269	0.0	940	1595	0.0
425	6610	1.0	555	59041	8.0	685	13806	0.0	815	1261	0.0	945	1410	0.0
430	12444	2.6	560	60976	6.0	690	12093	0.0	820	1551	0.0	950	1937	0.0
435	21116	5.6	565	62904	4.4	695	10566	0.0	825	1708	0.0	955	2186	0.0
440	33463	11.2	570	64555	3.2	700	9300	0.0	830	1592	0.0	960	1583	0.0
445	49089	19.4	575	65785	2.2	705	8110	0.0	835	1642	0.0	965	1953	0.0
450	57374	26.4	580	66948	1.5	710	7052	0.0	840	1514	0.0	970	1519	0.0
455	42663	22.4	585	67963	1.0	715	6233	0.0	845	1376	0.0	975	1168	0.0
460	25334	14.9	590	68001	0.7	720	5362	0.0	850	1592	0.0	980	1593	0.0
465	17751	11.6	595	67308	0.4	725	4563	0.0	855	1667	0.0	985	1722	0.0
470	12447	8.9	600	66343	0.3	730	3976	0.0	860	1662	0.0	990	1648	0.0
475	8641	6.6	605	64393	0.2	735	3424	0.0	865	1916	0.0	995	2495	0.0
480	7423	6.0	610	61634	0.1	740	3222	0.0	870	1655	0.0	1000	2643	0.0
485	7759	6.4	615	58349	0.1	745	3060	0.0	875	2036	0.0			

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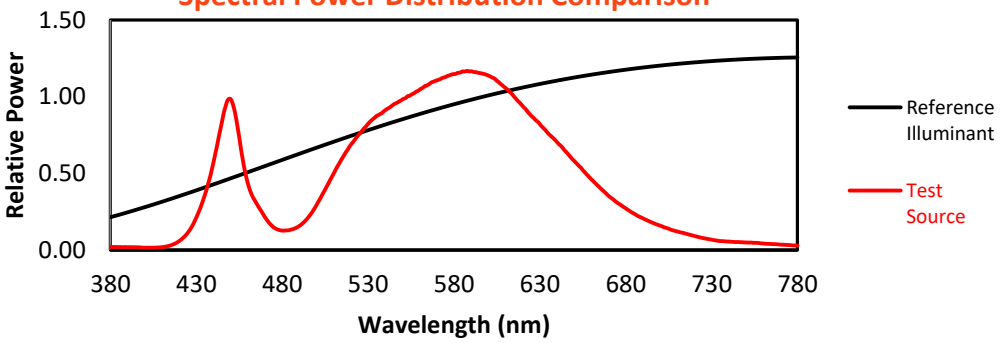
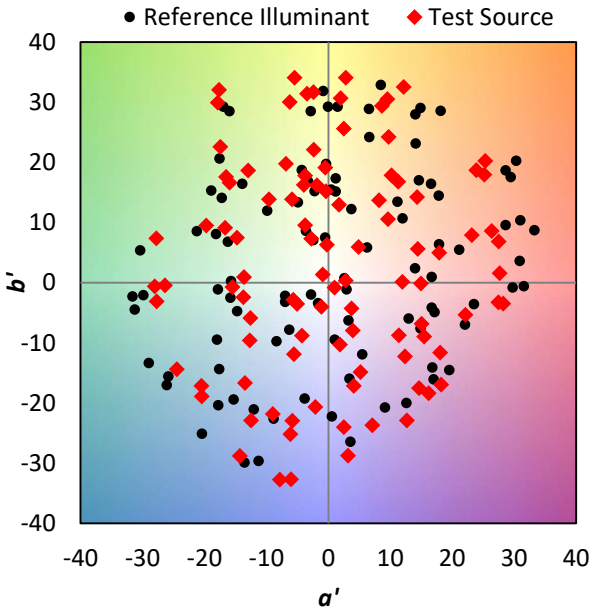
Summary

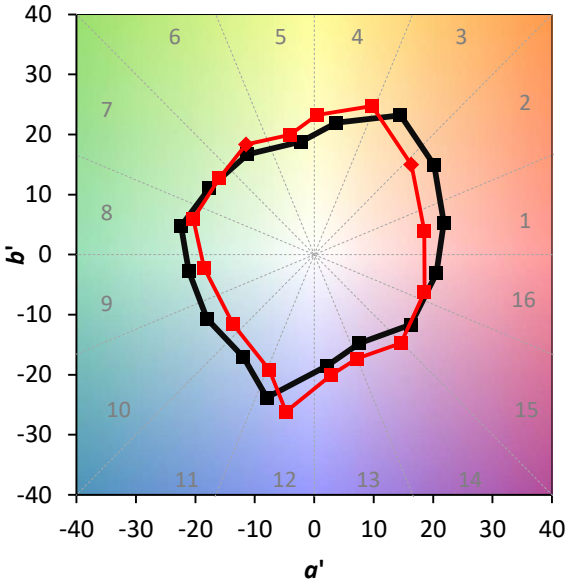
R_f = 76.2
R_g = 94.3
CIE R_a = 72.6
R_9 = -22.4

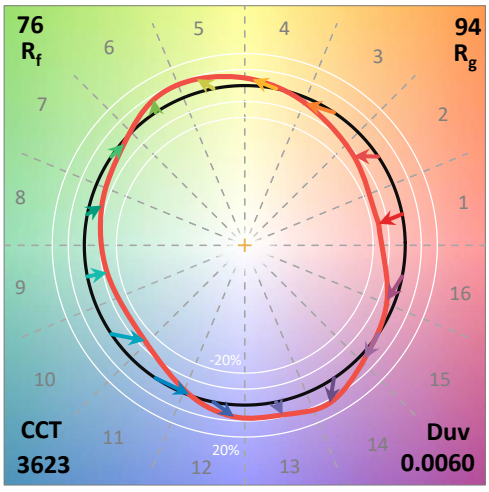
Spectral Power Distribution Comparison

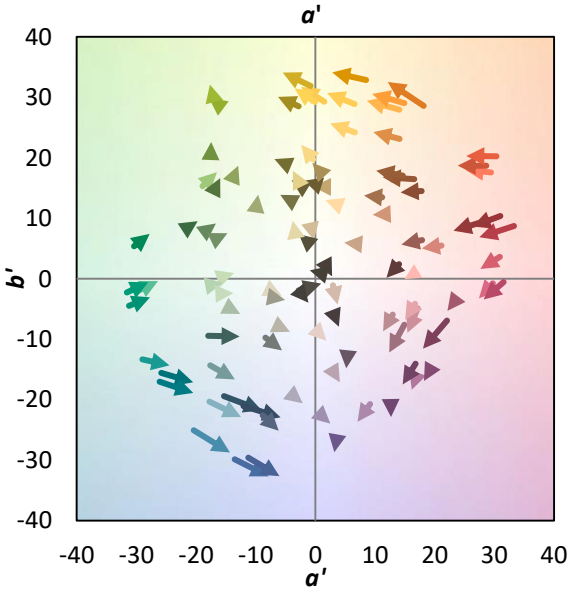


Color Vector Graphics









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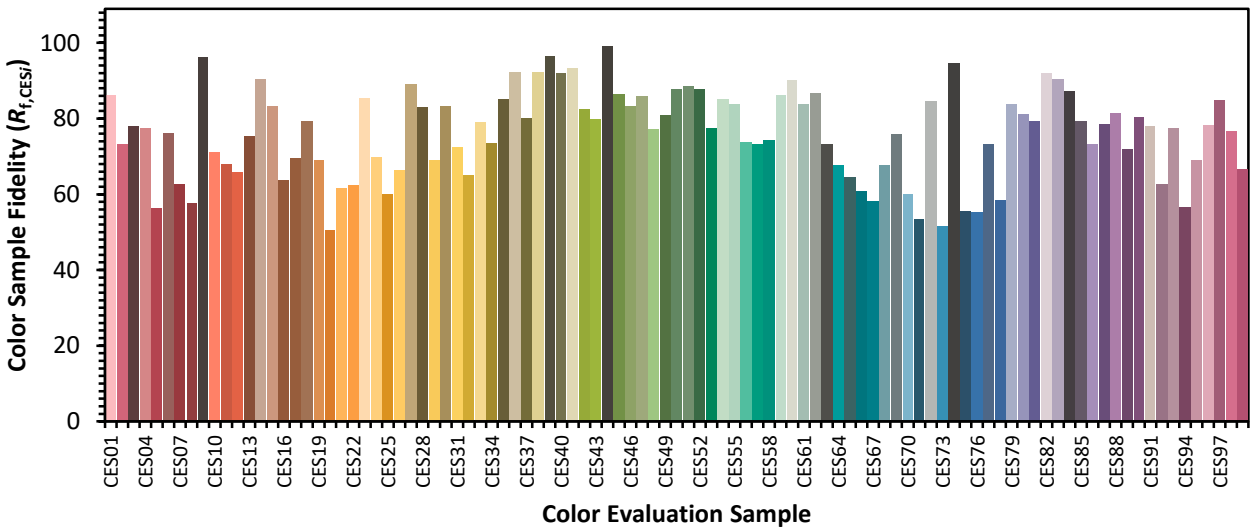
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 66	CES51 = 88	CES76 = 55
CES02 = 61	CES27 = 89	CES52 = 88	CES77 = 73
CES03 = 31	CES28 = 83	CES53 = 78	CES78 = 59
CES04 = 70	CES29 = 69	CES54 = 85	CES79 = 84
CES05 = 48	CES30 = 83	CES55 = 84	CES80 = 81
CES06 = 51	CES31 = 73	CES56 = 74	CES81 = 79
CES07 = 40	CES32 = 65	CES57 = 73	CES82 = 92
CES08 = 39	CES33 = 79	CES58 = 74	CES83 = 90
CES09 = 29	CES34 = 74	CES59 = 86	CES84 = 87
CES10 = 74	CES35 = 85	CES60 = 90	CES85 = 79
CES11 = 57	CES36 = 92	CES61 = 84	CES86 = 73
CES12 = 63	CES37 = 80	CES62 = 87	CES87 = 78
CES13 = 42	CES38 = 92	CES63 = 73	CES88 = 81
CES14 = 74	CES39 = 97	CES64 = 68	CES89 = 72
CES15 = 71	CES40 = 92	CES65 = 65	CES90 = 80
CES16 = 47	CES41 = 93	CES66 = 61	CES91 = 78
CES17 = 49	CES42 = 82	CES67 = 58	CES92 = 63
CES18 = 56	CES43 = 80	CES68 = 68	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 76	CES94 = 57
CES20 = 65	CES45 = 86	CES70 = 60	CES95 = 69
CES21 = 86	CES46 = 83	CES71 = 54	CES96 = 78
CES22 = 78	CES47 = 86	CES72 = 85	CES97 = 85
CES23 = 92	CES48 = 77	CES73 = 52	CES98 = 77
CES24 = 91	CES49 = 81	CES74 = 95	CES99 = 67
CES25 = 72	CES50 = 88	CES75 = 56	



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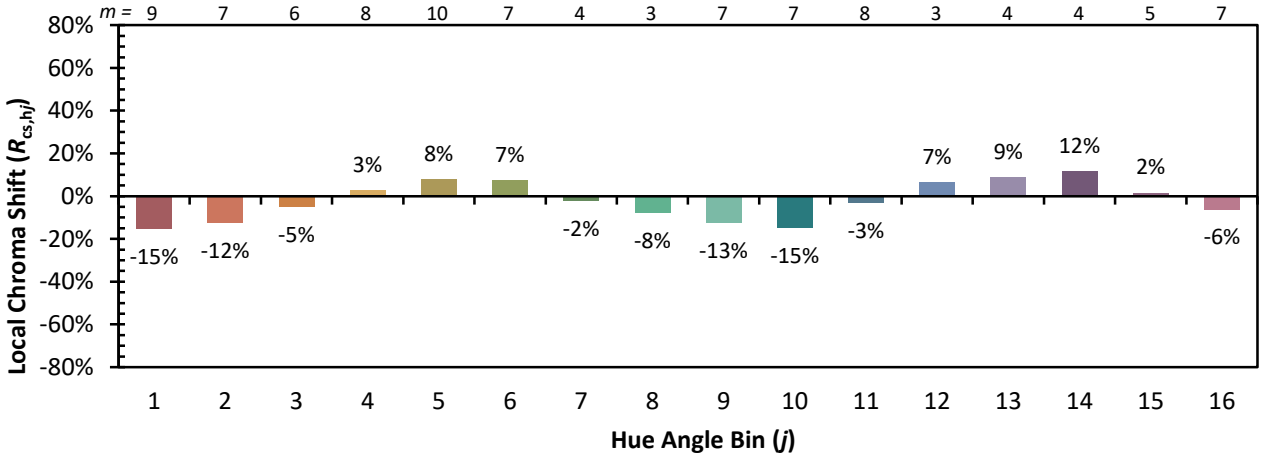
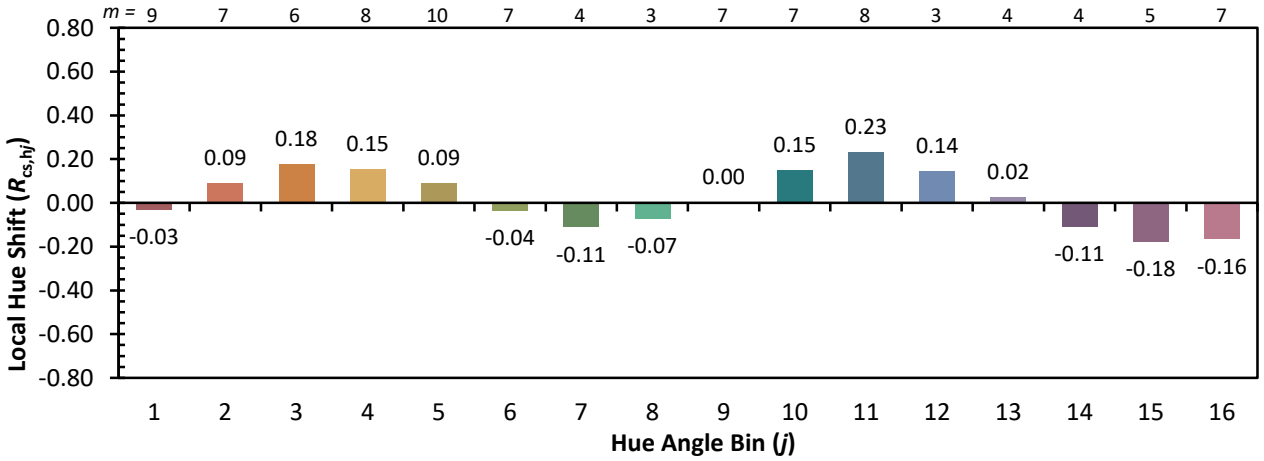
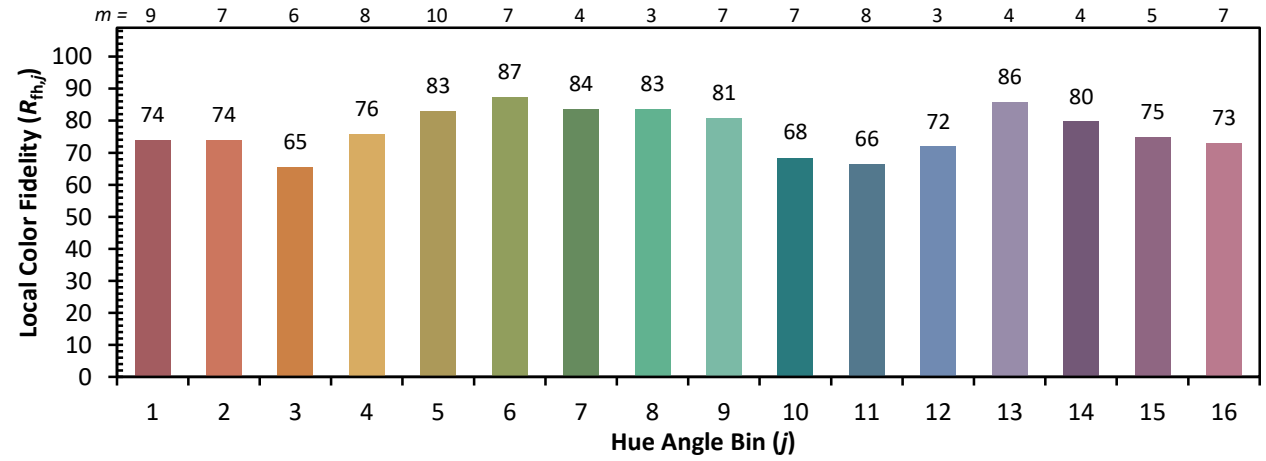
Color Rendition by Hue-Angle Bin







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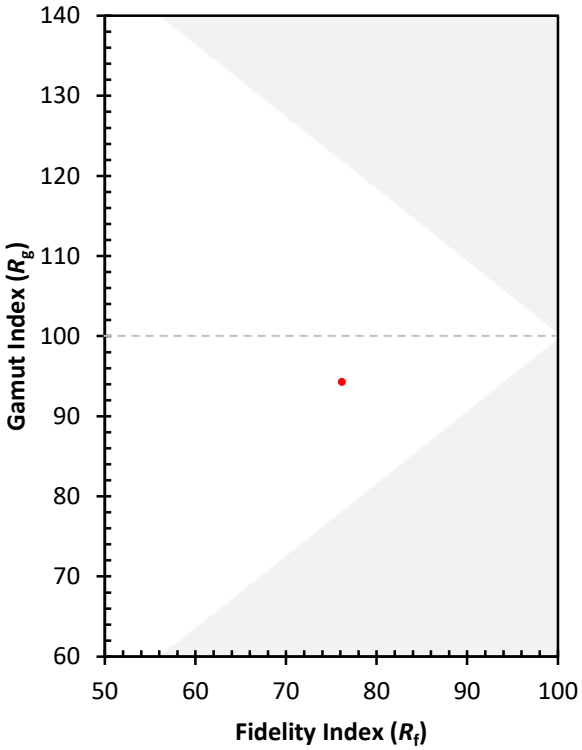
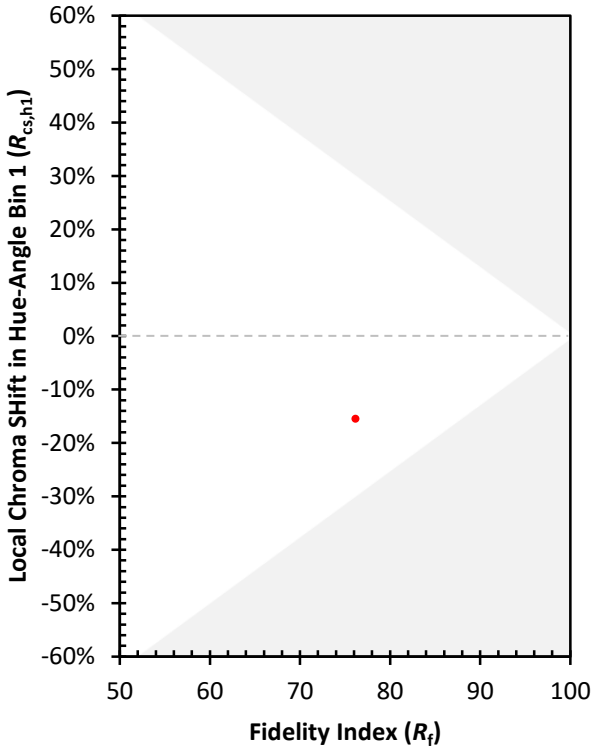
Measure Comparisons





(END OF REPORT)