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: P833543

Luminaire Tested: **TTN-D2-735-U-WQ-CG-UPL2**

Issue Date: 5/15/2024

Report Generated By 670246001

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:	P833543
	REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab:	INNOVATION CENTER
Issue Date:	5/15/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TTN-D2-735-U-WQ-CG-UPL2
Description:	TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
	3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5303.8 lumens
Efficiency:	N/A
Efficacy:	112.8 lumens/watt
Luminous Opening:	Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification:	Type V - Short
BUG Rating:	B2 - U4 - G1

Input Watts (W):	47
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:	24 FT

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REPORT NUMBER: P833543
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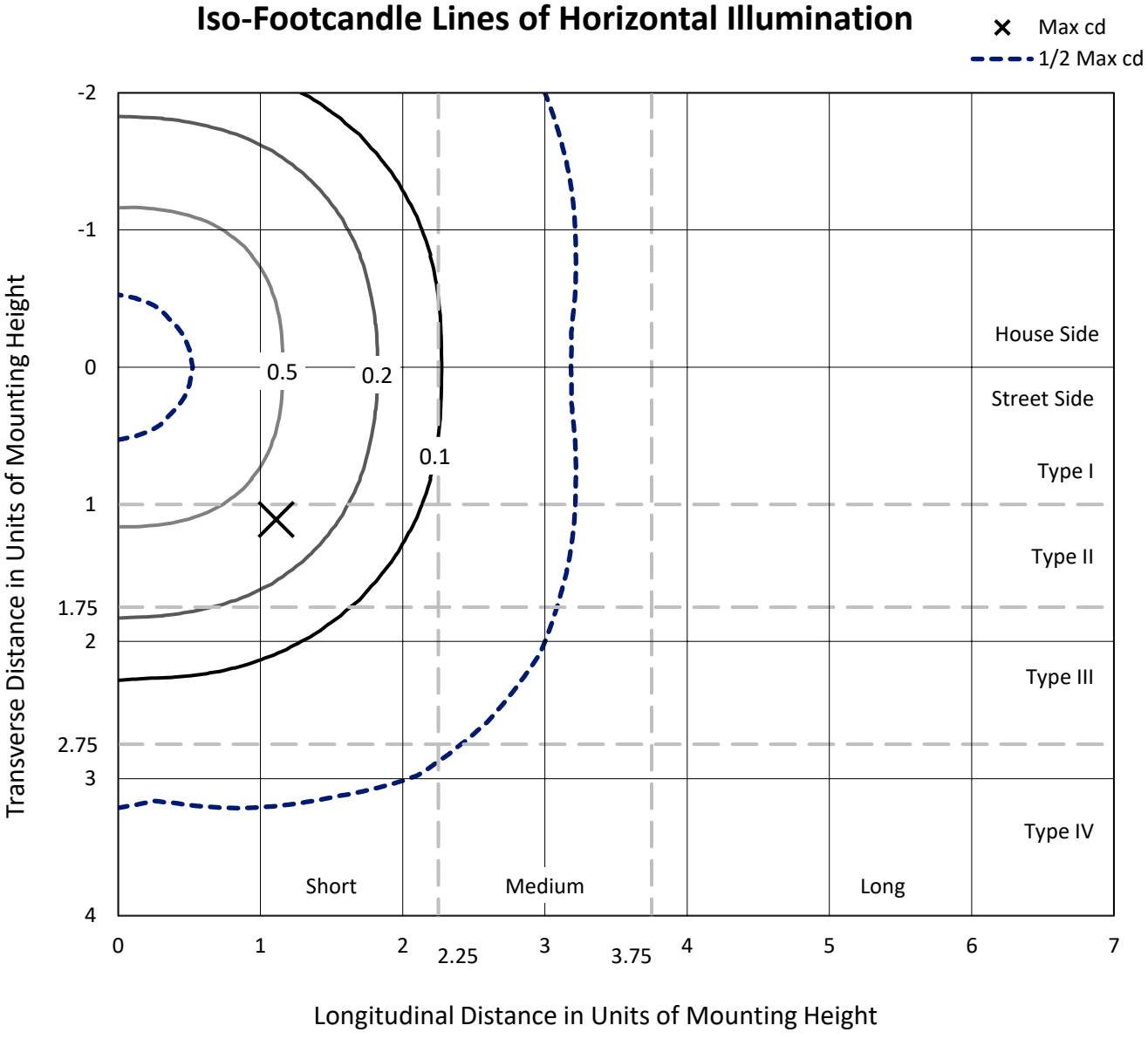
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
Type V - Short - N/A

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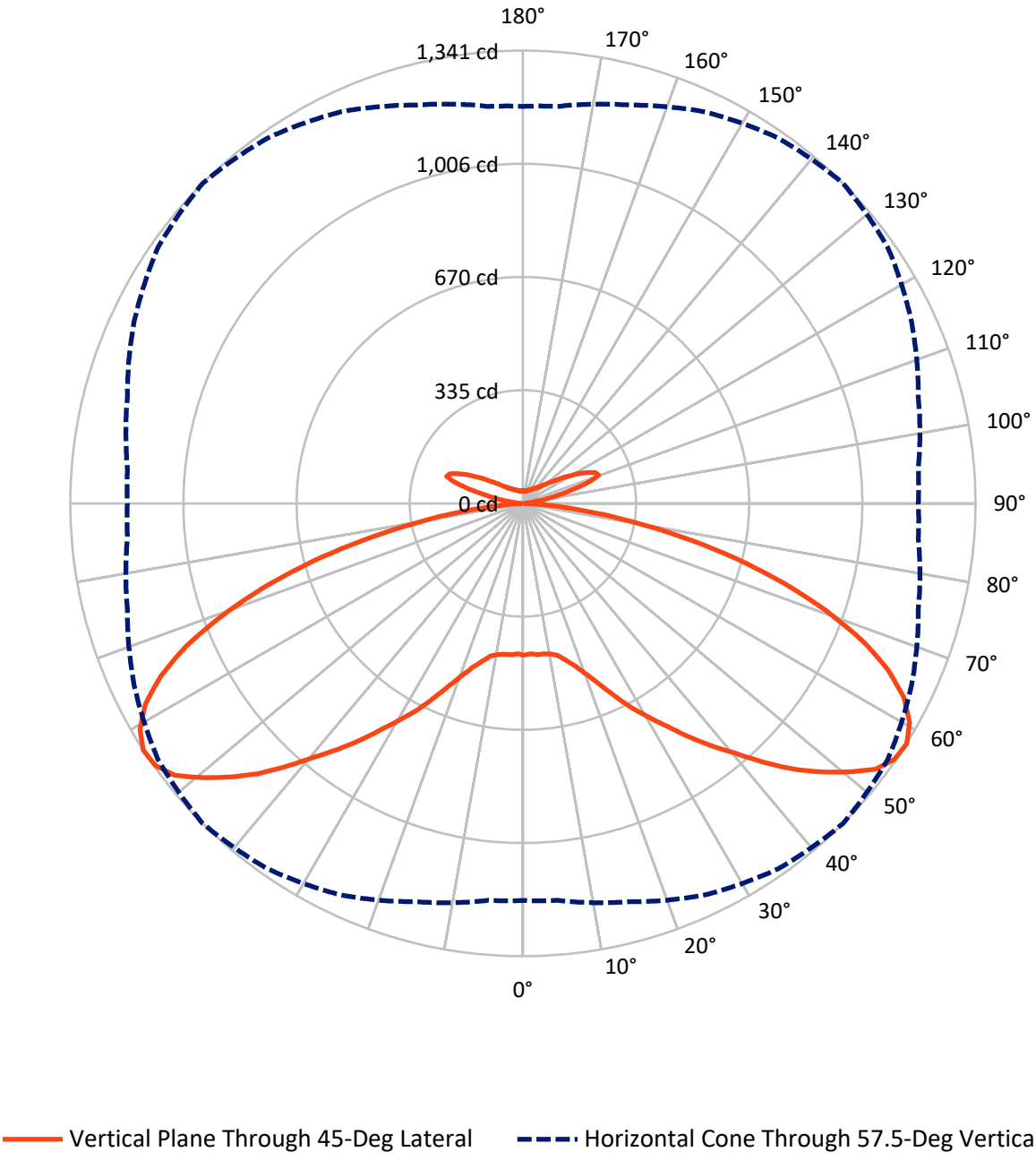
Luminous Intensity Polar Plot



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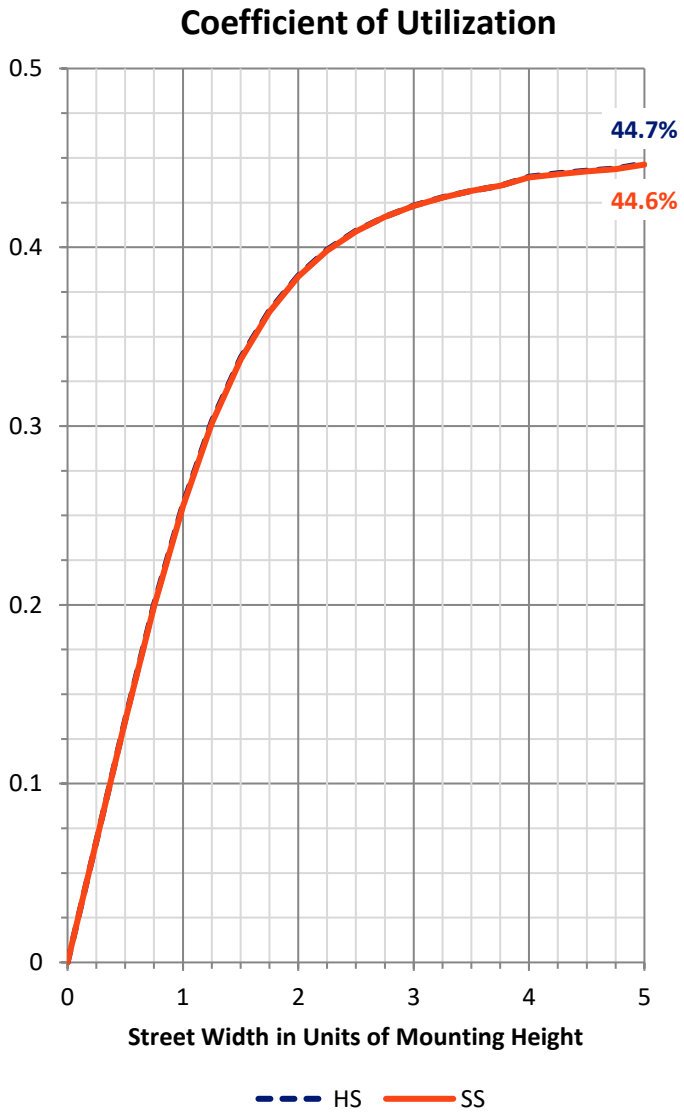
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2380.4	271.5	2651.9
	% Fixture	44.9	5.1	50.0
Street Side	Lumens	2380.4	271.5	2651.9
	% Fixture	44.9	5.1	50.0
Total	Lumens	4760.7	543.0	5303.8
	% Fixture	89.8	10.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	0.8
10°-20°	138.6	2.6
20°-30°	291.7	5.5
30°-40°	525.9	9.9
40°-50°	836.0	15.8
50°-60°	1115.3	21.0
60°-70°	1077.6	20.3
70°-80°	624.4	11.8
80°-90°	108.4	2.0
90°-100°	12.1	0.2
100°-110°	123.2	2.3
110°-120°	180.1	3.4
120°-130°	104.5	2.0
130°-140°	55.4	1.0
140°-150°	32.9	0.6
150°-160°	20.2	0.4
160°-170°	11.0	0.2
170°-180°	3.6	0.1
0°-90°	4760.7	89.8
0°-180°	5303.8	100.0



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REPORT NUMBER: P833543
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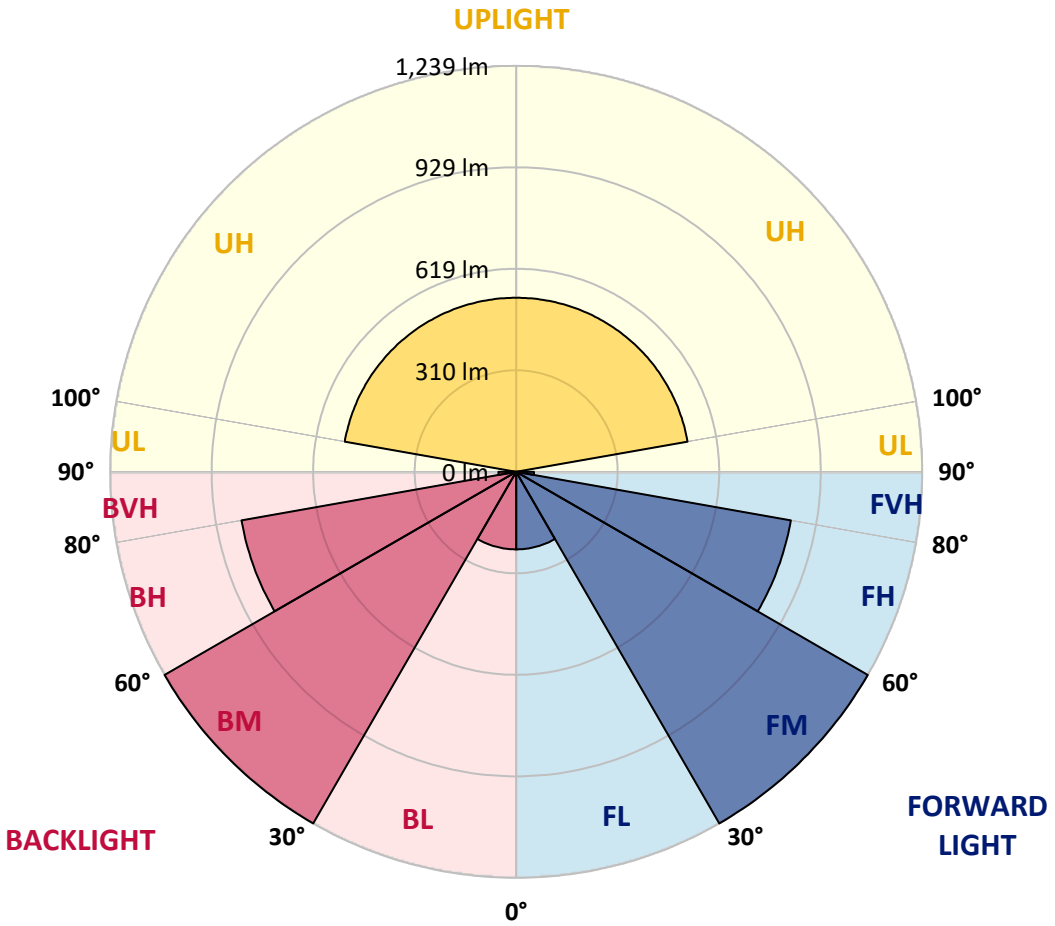
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	236.6	4.5			
FM	(30°-60°)	1238.6	23.4			
FH	(60°-80°)	851.0	16.0			G1/1800
FVH	(80°-90°)	54.2	1.0			G1/100
BL	(0°-30°)	236.6	4.5	B1/500		
BM	(30°-60°)	1238.6	23.4	B2/2500		
BH	(60°-80°)	851.0	16.0	B2/1000		G1/1800
BVH	(80°-90°)	54.2	1.0			G1/100
UL	(90°-100°)	12.1	0.2		U2/50	
UH	(100°-180°)	530.9	10.0		U4/1000	

BUG Rating: B2-U4-G1
Type V Short



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REPORT NUMBER: P833543
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	449.7	449.7	449.7	449.7	449.7	*449.7*	449.7	449.7	449.7	449.7	449.7
2.5°	445.5	445.5	445.5	445.5	445.5	*445.5*	445.5	445.5	445.5	445.5	445.5
5°	449.7	449.7	449.7	449.7	449.7	*449.7*	449.7	449.7	449.7	449.7	449.7
7.5°	445.5	445.5	449.7	449.7	449.7	*449.7*	449.7	449.7	449.7	445.5	445.5
10°	449.7	449.7	449.7	453.8	453.8	*453.8*	453.8	453.8	449.7	449.7	449.7
12.5°	457.9	457.9	462.0	462.0	462.0	*462.0*	462.0	462.0	462.0	457.9	457.9
15°	478.5	478.5	478.5	482.7	482.7	*482.7*	482.7	482.7	478.5	478.5	478.5
17.5°	499.2	499.2	503.3	503.3	507.4	*507.4*	507.4	503.3	503.3	503.3	503.3
20°	528.0	528.0	532.2	532.2	536.3	*540.4*	540.4	536.3	532.2	532.2	532.2
22.5°	565.2	569.3	569.3	569.3	573.4	*581.7*	577.6	573.4	569.3	569.3	569.3
25°	610.6	614.7	618.8	618.8	622.9	*631.2*	631.2	618.8	618.8	618.8	618.8
27.5°	664.2	668.3	672.4	672.4	676.6	*684.8*	680.7	672.4	672.4	668.3	668.3
30°	713.7	717.8	721.9	726.1	730.2	*734.3*	734.3	726.1	721.9	717.8	713.7
32.5°	763.2	763.2	771.4	779.7	787.9	*787.9*	792.1	779.7	771.4	763.2	759.1
35°	812.7	816.8	820.9	833.3	845.7	*849.8*	845.7	833.3	820.9	812.7	812.7
37.5°	866.3	870.5	874.6	891.1	903.5	*911.7*	903.5	891.1	874.6	866.3	862.2
40°	924.1	928.2	932.3	953.0	965.3	*973.6*	961.2	948.8	932.3	924.1	920.0
42.5°	977.7	986.0	994.2	1019.0	1039.6	*1047.8*	1035.5	1014.8	998.3	977.7	973.6
45°	1043.7	1052.0	1064.3	1089.1	1109.7	*1122.1*	1105.6	1085.0	1060.2	1043.7	1039.6
47.5°	1097.3	1105.6	1118.0	1151.0	1179.9	*1188.1*	1171.6	1146.9	1113.8	1093.2	1089.1
50°	1138.6	1146.9	1171.6	1208.7	1241.7	*1250.0*	1233.5	1200.5	1163.4	1134.5	1130.3
52.5°	1171.6	1179.9	1208.7	1258.2	1295.4	*1307.7*	1287.1	1250.0	1200.5	1167.5	1163.4
55°	1188.1	1192.2	1229.4	1283.0	1320.1	*1336.6*	1316.0	1274.7	1221.1	1184.0	1179.9
57.5°	*1175.7*	*1179.9*	*1221.1*	*1278.9*	*1320.1*	*1340.7*	*1320.1*	*1270.6*	*1212.9*	*1175.7*	*1171.6*
60°	1151.0	1151.0	1188.1	1254.1	1303.6	*1316.0*	1295.4	1245.9	1184.0	1146.9	1142.7
62.5°	1105.6	1101.5	1146.9	1204.6	1254.1	*1266.5*	1250.0	1200.5	1138.6	1101.5	1097.3
65°	1019.0	1010.7	1076.7	1130.3	1175.7	*1188.1*	1175.7	1130.3	1072.6	1014.8	1006.6
67.5°	915.8	903.5	965.3	1027.2	1068.5	*1085.0*	1068.5	1031.3	965.3	907.6	903.5
70°	808.6	796.2	845.7	899.3	944.7	*953.0*	936.5	899.3	837.4	800.3	800.3
72.5°	680.7	668.3	713.7	754.9	800.3	*808.6*	792.1	759.1	713.7	676.6	672.4
75°	540.4	528.0	569.3	602.3	647.7	*651.8*	643.6	606.4	569.3	532.2	532.2
77.5°	400.2	387.8	420.8	449.7	486.8	*486.8*	482.7	453.8	420.8	396.0	396.0
80°	264.0	255.8	284.6	297.0	330.0	*330.0*	325.9	305.3	280.5	264.0	259.9
82.5°	148.5	140.3	165.0	169.1	193.9	*193.9*	189.8	173.3	156.8	144.4	144.4
85°	57.8	49.5	66.0	70.1	82.5	*82.5*	78.4	74.3	61.9	53.6	53.6
87.5°	4.1	4.1	8.3	8.3	12.4	*12.4*	12.4	8.3	8.3	4.1	4.1
90°	4.6	4.6	5.6	5.6	5.6	*5.6*	5.6	5.6	5.6	4.6	4.6
92.5°	4.6	4.6	4.6	6.5	7.4	*6.5*	7.4	5.6	5.6	4.6	4.6
95°	5.6	5.6	6.5	8.4	10.2	*11.1*	11.1	6.5	6.5	5.6	5.6
97.5°	7.4	8.4	8.4	10.2	16.7	*30.7*	18.6	9.3	9.3	8.4	7.4
100°	12.1	13.0	13.0	23.2	49.2	*66.0*	47.4	24.2	17.7	13.0	13.0
102.5°	39.0	40.9	50.2	75.3	111.5	*101.3*	85.5	80.8	55.7	44.6	42.7
105°	99.4	98.5	105.9	125.4	156.1	*153.3*	141.2	128.2	110.6	102.2	102.2
107.5°	131.0	131.0	137.5	154.2	177.4	*207.2*	210.0	166.3	145.9	136.6	135.6
110°	147.7	147.7	153.3	167.2	197.9	*239.7*	237.8	205.3	180.2	168.2	166.3

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Scaled Data Report

REPORT NUMBER: P833543
CATALOG NUMBER: TTN-D2-735-U-WQ-CG-UPL2

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	151.4	152.4	159.8	181.2	214.6	*233.2*	224.8	211.8	200.7	191.4	189.5
115°	157.0	157.0	165.4	185.8	204.4	*211.8*	202.5	192.3	184.9	181.2	183.0
117.5°	155.1	157.9	159.8	170.9	183.0	*188.6*	183.9	170.0	164.4	162.6	159.8
120°	144.0	144.0	145.9	151.4	157.9	*160.7*	158.9	149.6	144.9	144.0	142.1
122.5°	128.2	129.1	128.2	131.0	135.6	*138.4*	136.6	129.1	127.3	127.3	125.4
125°	112.4	112.4	111.5	113.3	116.1	*115.2*	116.1	112.4	111.5	111.5	110.6
127.5°	101.3	100.3	98.5	99.4	100.3	*100.3*	101.3	97.5	98.5	99.4	98.5
130°	90.1	90.1	88.3	88.3	88.3	*86.4*	88.3	86.4	87.3	88.3	89.2
132.5°	79.9	79.9	77.1	76.2	76.2	*76.2*	77.1	76.2	78.0	79.9	79.9
135°	71.5	71.5	68.7	69.7	69.7	*68.7*	69.7	68.7	70.6	71.5	71.5
137.5°	65.0	65.0	63.2	63.2	63.2	*62.2*	63.2	63.2	64.1	66.0	66.9
140°	59.5	59.5	58.5	58.5	57.6	*58.5*	58.5	58.5	59.5	60.4	60.4
142.5°	56.7	55.7	54.8	53.9	54.8	*54.8*	54.8	53.9	54.8	56.7	56.7
145°	52.0	52.0	51.1	51.1	51.1	*52.0*	51.1	51.1	52.0	52.0	53.0
147.5°	49.2	49.2	48.3	49.2	49.2	*49.2*	49.2	48.3	49.2	49.2	50.2
150°	48.3	47.4	46.5	47.4	47.4	*46.5*	46.5	46.5	46.5	47.4	47.4
152.5°	45.5	45.5	44.6	45.5	44.6	*44.6*	44.6	44.6	44.6	45.5	46.5
155°	43.7	43.7	42.7	43.7	43.7	*43.7*	43.7	43.7	43.7	43.7	43.7
157.5°	41.8	42.7	41.8	41.8	41.8	*41.8*	41.8	41.8	41.8	42.7	42.7
160°	40.9	40.9	40.9	40.9	39.9	*39.9*	39.9	40.9	40.9	40.9	41.8
162.5°	39.9	39.9	39.9	39.9	39.0	*39.0*	39.0	39.0	39.9	39.9	40.9
165°	39.9	39.0	39.0	39.0	38.1	*38.1*	38.1	38.1	39.0	39.9	39.0
167.5°	38.1	38.1	38.1	38.1	38.1	*37.2*	37.2	38.1	38.1	38.1	39.0
170°	38.1	38.1	37.2	37.2	37.2	*37.2*	37.2	37.2	37.2	37.2	38.1
172.5°	38.1	38.1	38.1	38.1	37.2	*37.2*	37.2	37.2	37.2	38.1	38.1
175°	38.1	38.1	38.1	38.1	37.2	*37.2*	37.2	38.1	38.1	38.1	37.2
177.5°	38.1	38.1	38.1	38.1	37.2	*38.1*	38.1	38.1	38.1	38.1	38.1
180°	38.1	38.1	38.1	38.1	38.1	*38.1*	38.1	38.1	38.1	38.1	38.1

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

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2411-284-1

Test Date: 11/15/2024

Luminaire Tested: TTN-D0-735-U-WQ

Data in this report applies to TT and TTN families of products

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

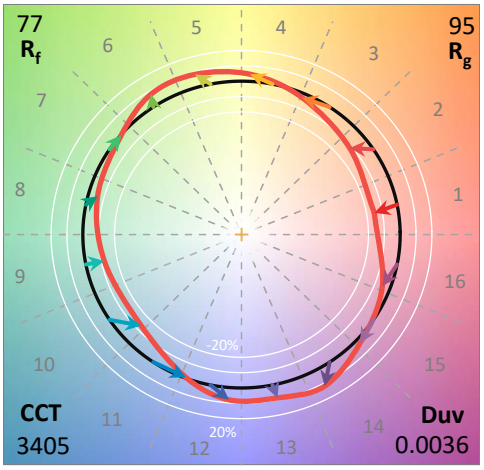
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2411-284-1
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	11/15/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**TTN-D0-735-U-WQ**
Description:	TOPTIER NANO LED PARKING GARAGE LUMINAIRE. 3500K, 70 CRI LEDS AND WIDE DISTRIBUTION

Spectral Parameters

CCT (K):	3405
CIE u':	0.2365
CIE v':	0.5180
Duv:	0.0036
CIE x:	0.4148
CIE y:	0.4038
CIE z:	0.1814
Peak Wavelength (nm):	596
Dominant Wavelength (nm):	579
Purity:	45.70672
Rf:	76.6
Rg:	95.4

CRI (Ra):	73.9
R1:	71.3
R2:	80.3
R3:	87.8
R4:	73.2
R5:	69.8
R6:	71.8
R7:	82.8
R8:	54.1
R9:	-18.0
R10:	53.1
R11:	68.6
R12:	42.6
R13:	72.5
R14:	92.7
R15:	64.3



Test Conditions

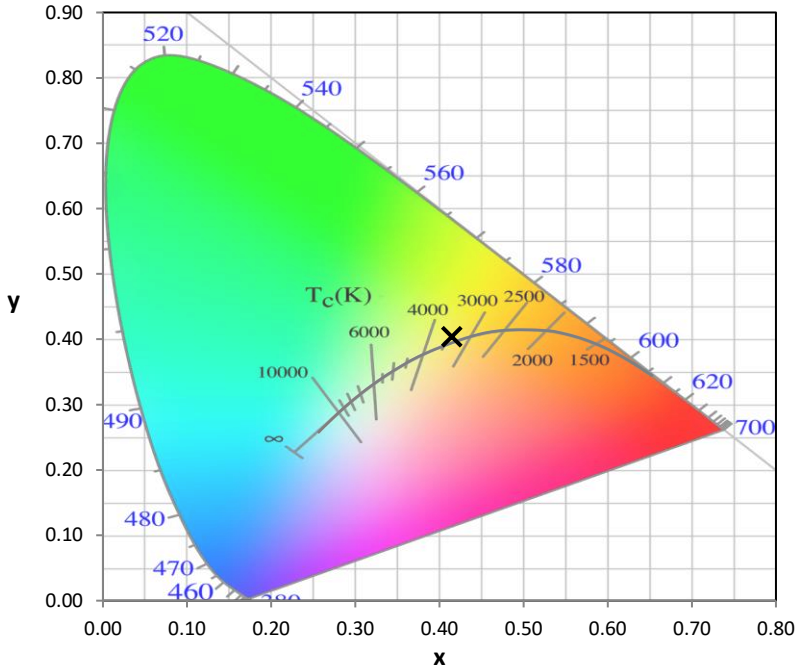
Stabilization Time:	38M
Operation Time:	1H 38M
Sphere Temperature (°C):	24.9

REPORT NUMBER: SP1-2411-284-1

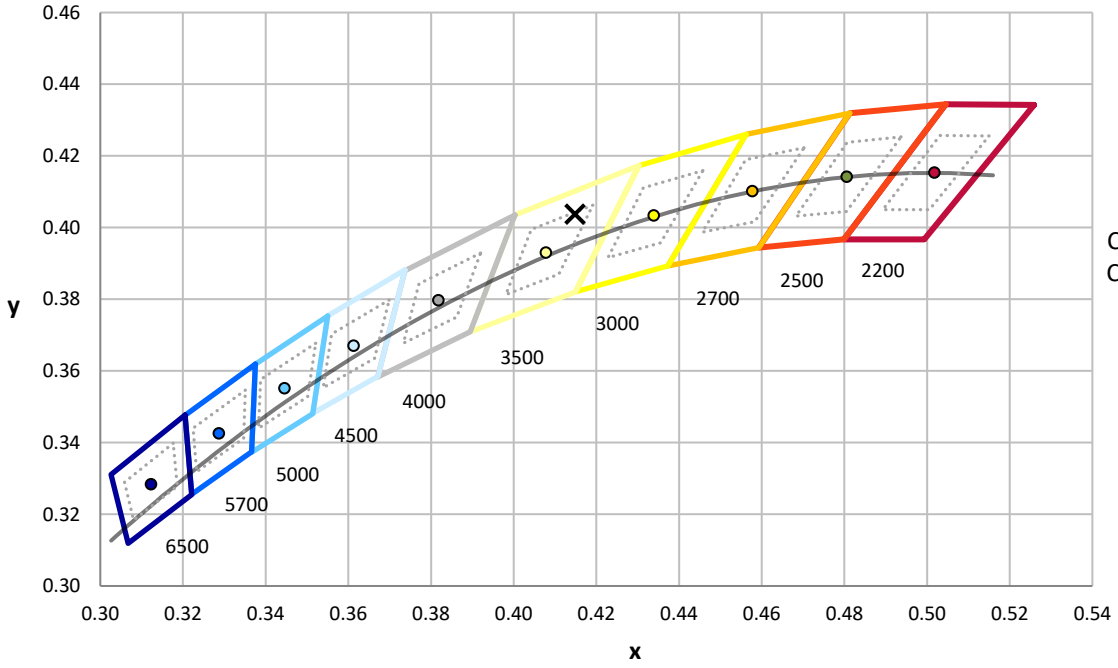
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085	10/22/2024	10/22/2025
Room Thermometer	IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2411-284-1

CIE 1931 Chromaticity Diagram



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

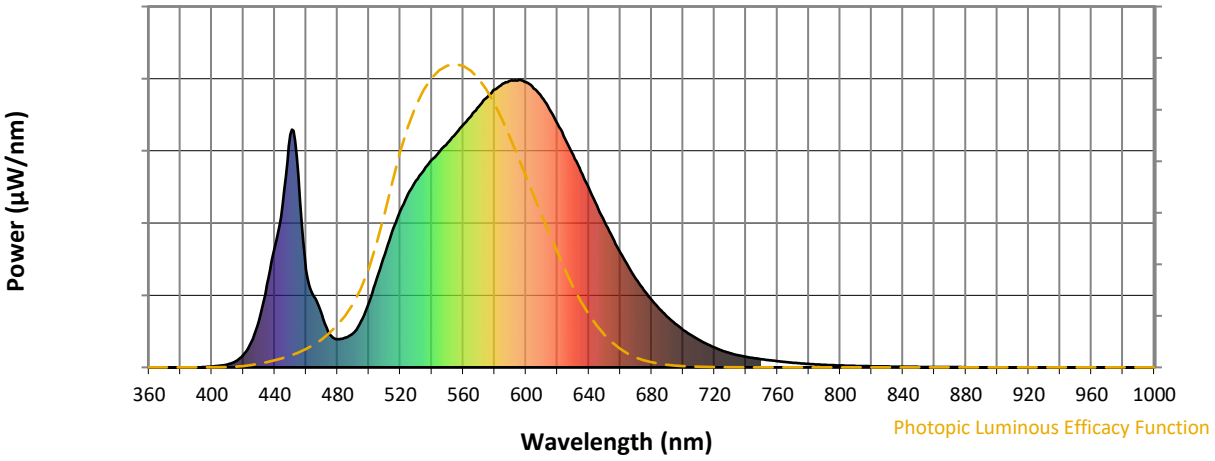


CCT = 3405K
CIE x = 0.4148
CIE y = 0.4038
Duv = 0.0036

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2411-284-1

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	119	NR	620	846	NR	750	28	NR	880	1	NR
365	0	NR	495	160	NR	625	793	NR	755	25	NR	885	0	NR
370	0	NR	500	225	NR	630	739	NR	760	22	NR	890	0	NR
375	0	NR	505	308	NR	635	681	NR	765	19	NR	895	0	NR
380	0	NR	510	392	NR	640	623	NR	770	16	NR	900	0	NR
385	0	NR	515	474	NR	645	563	NR	775	14	NR	905	0	NR
390	0	NR	520	545	NR	650	506	NR	780	12	NR	910	0	NR
395	1	NR	525	603	NR	655	451	NR	785	10	NR	915	0	NR
400	3	NR	530	649	NR	660	399	NR	790	9	NR	920	0	NR
405	5	NR	535	687	NR	665	352	NR	795	8	NR	925	0	NR
410	11	NR	540	721	NR	670	307	NR	800	6	NR	930	0	NR
415	21	NR	545	751	NR	675	268	NR	805	6	NR	935	0	NR
420	43	NR	550	779	NR	680	234	NR	810	5	NR	940	0	NR
425	88	NR	555	811	NR	685	203	NR	815	4	NR	945	0	NR
430	163	NR	560	843	NR	690	176	NR	820	4	NR	950	0	NR
435	288	NR	565	873	NR	695	152	NR	825	3	NR	955	0	NR
440	416	NR	570	907	NR	700	131	NR	830	3	NR	960	0	NR
445	566	NR	575	938	NR	705	112	NR	835	3	NR	965	0	NR
450	810	NR	580	965	NR	710	96	NR	840	2	NR	970	0	NR
455	669	NR	585	986	NR	715	81	NR	845	2	NR	975	0	NR
460	338	NR	590	997	NR	720	69	NR	850	2	NR	980	0	NR
465	246	NR	595	997	NR	725	58	NR	855	1	NR	985	0	NR
470	182	NR	600	991	NR	730	49	NR	860	1	NR	990	0	NR
475	115	NR	605	968	NR	735	42	NR	865	1	NR	995	0	NR
480	97	NR	610	939	NR	740	37	NR	870	1	NR	1000	0	NR
485	103	NR	615	896	NR	745	32	NR	875	1	NR			

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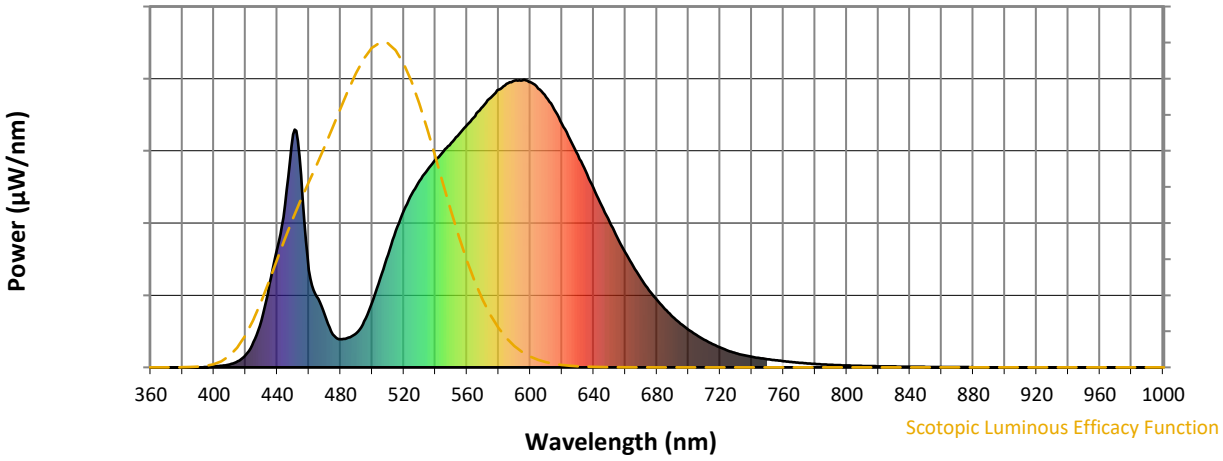
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.33**

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	119	NR	620	846	NR	750	28	NR	880	1	NR
365	0	NR	495	160	NR	625	793	NR	755	25	NR	885	0	NR
370	0	NR	500	225	NR	630	739	NR	760	22	NR	890	0	NR
375	0	NR	505	308	NR	635	681	NR	765	19	NR	895	0	NR
380	0	NR	510	392	NR	640	623	NR	770	16	NR	900	0	NR
385	0	NR	515	474	NR	645	563	NR	775	14	NR	905	0	NR
390	0	NR	520	545	NR	650	506	NR	780	12	NR	910	0	NR
395	1	NR	525	603	NR	655	451	NR	785	10	NR	915	0	NR
400	3	NR	530	649	NR	660	399	NR	790	9	NR	920	0	NR
405	5	NR	535	687	NR	665	352	NR	795	8	NR	925	0	NR
410	11	NR	540	721	NR	670	307	NR	800	6	NR	930	0	NR
415	21	NR	545	751	NR	675	268	NR	805	6	NR	935	0	NR
420	43	NR	550	779	NR	680	234	NR	810	5	NR	940	0	NR
425	88	NR	555	811	NR	685	203	NR	815	4	NR	945	0	NR
430	163	NR	560	843	NR	690	176	NR	820	4	NR	950	0	NR
435	288	NR	565	873	NR	695	152	NR	825	3	NR	955	0	NR
440	416	NR	570	907	NR	700	131	NR	830	3	NR	960	0	NR
445	566	NR	575	938	NR	705	112	NR	835	3	NR	965	0	NR
450	810	NR	580	965	NR	710	96	NR	840	2	NR	970	0	NR
455	669	NR	585	986	NR	715	81	NR	845	2	NR	975	0	NR
460	338	NR	590	997	NR	720	69	NR	850	2	NR	980	0	NR
465	246	NR	595	997	NR	725	58	NR	855	1	NR	985	0	NR
470	182	NR	600	991	NR	730	49	NR	860	1	NR	990	0	NR
475	115	NR	605	968	NR	735	42	NR	865	1	NR	995	0	NR
480	97	NR	610	939	NR	740	37	NR	870	1	NR	1000	0	NR
485	103	NR	615	896	NR	745	32	NR	875	1	NR			

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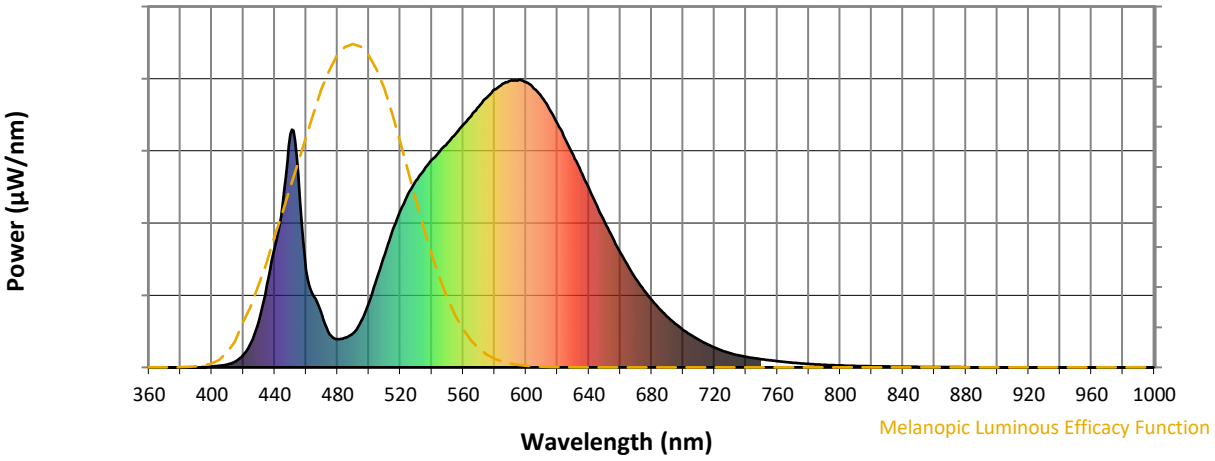
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.47**

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	119	NR	620	846	NR	750	28	NR	880	1	NR
365	0	NR	495	160	NR	625	793	NR	755	25	NR	885	0	NR
370	0	NR	500	225	NR	630	739	NR	760	22	NR	890	0	NR
375	0	NR	505	308	NR	635	681	NR	765	19	NR	895	0	NR
380	0	NR	510	392	NR	640	623	NR	770	16	NR	900	0	NR
385	0	NR	515	474	NR	645	563	NR	775	14	NR	905	0	NR
390	0	NR	520	545	NR	650	506	NR	780	12	NR	910	0	NR
395	1	NR	525	603	NR	655	451	NR	785	10	NR	915	0	NR
400	3	NR	530	649	NR	660	399	NR	790	9	NR	920	0	NR
405	5	NR	535	687	NR	665	352	NR	795	8	NR	925	0	NR
410	11	NR	540	721	NR	670	307	NR	800	6	NR	930	0	NR
415	21	NR	545	751	NR	675	268	NR	805	6	NR	935	0	NR
420	43	NR	550	779	NR	680	234	NR	810	5	NR	940	0	NR
425	88	NR	555	811	NR	685	203	NR	815	4	NR	945	0	NR
430	163	NR	560	843	NR	690	176	NR	820	4	NR	950	0	NR
435	288	NR	565	873	NR	695	152	NR	825	3	NR	955	0	NR
440	416	NR	570	907	NR	700	131	NR	830	3	NR	960	0	NR
445	566	NR	575	938	NR	705	112	NR	835	3	NR	965	0	NR
450	810	NR	580	965	NR	710	96	NR	840	2	NR	970	0	NR
455	669	NR	585	986	NR	715	81	NR	845	2	NR	975	0	NR
460	338	NR	590	997	NR	720	69	NR	850	2	NR	980	0	NR
465	246	NR	595	997	NR	725	58	NR	855	1	NR	985	0	NR
470	182	NR	600	991	NR	730	49	NR	860	1	NR	990	0	NR
475	115	NR	605	968	NR	735	42	NR	865	1	NR	995	0	NR
480	97	NR	610	939	NR	740	37	NR	870	1	NR	1000	0	NR
485	103	NR	615	896	NR	745	32	NR	875	1	NR			

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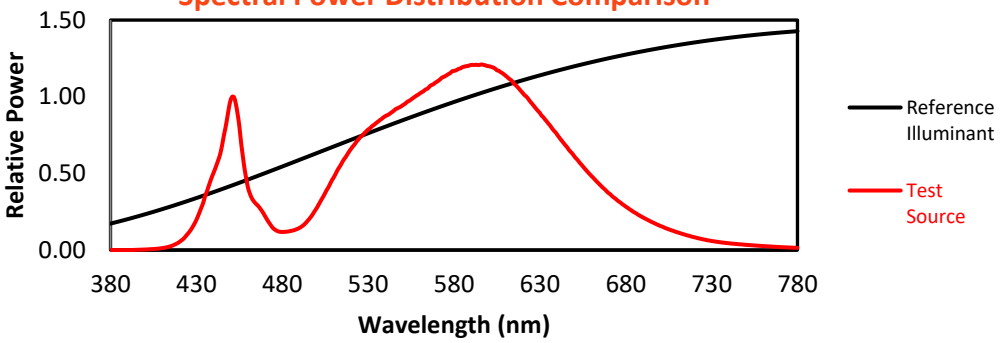
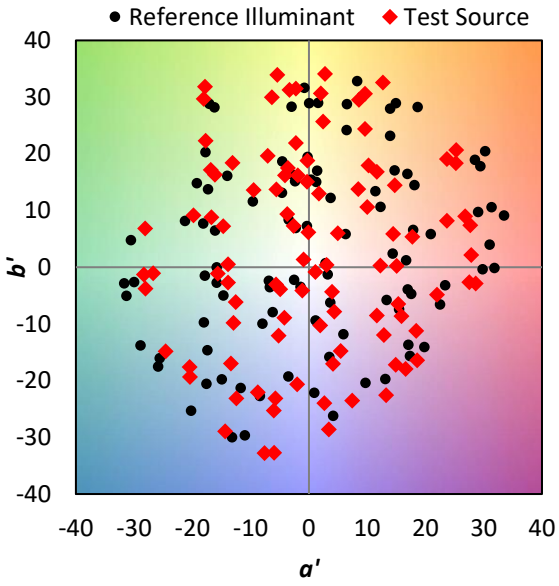
Summary

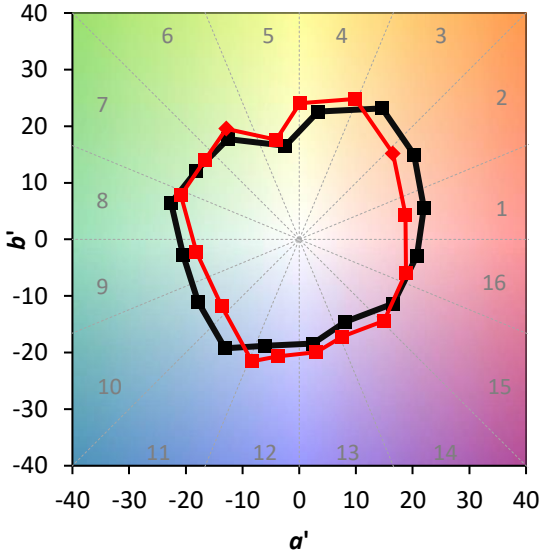
R_f = 76.6
R_g = 95.4
CIE R_a = 73.9
R_9 = -18.0

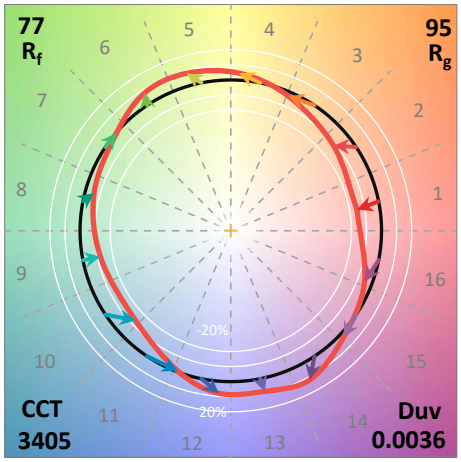
Spectral Power Distribution Comparison

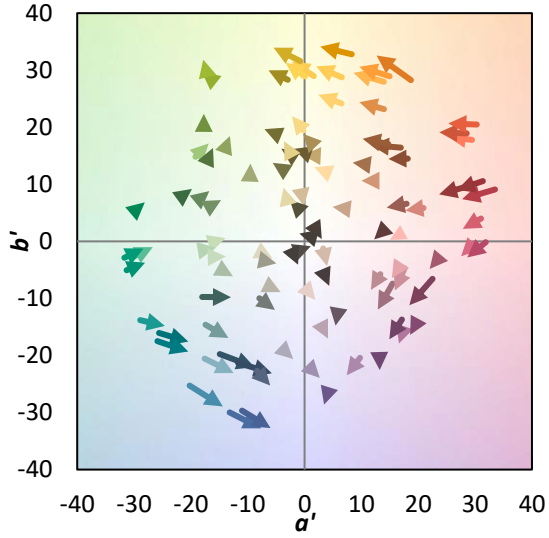


Color Vector Graphics









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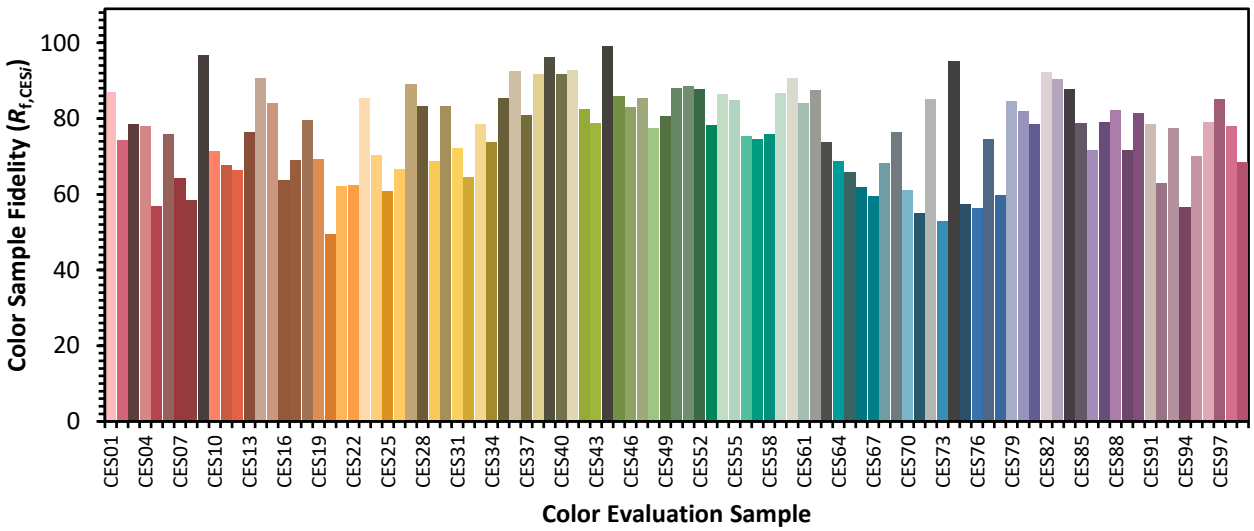
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 67	CES51 = 88	CES76 = 56
CES02 = 62	CES27 = 89	CES52 = 88	CES77 = 75
CES03 = 31	CES28 = 83	CES53 = 78	CES78 = 60
CES04 = 70	CES29 = 69	CES54 = 86	CES79 = 85
CES05 = 48	CES30 = 83	CES55 = 85	CES80 = 82
CES06 = 51	CES31 = 72	CES56 = 75	CES81 = 78
CES07 = 41	CES32 = 65	CES57 = 75	CES82 = 92
CES08 = 40	CES33 = 78	CES58 = 76	CES83 = 90
CES09 = 29	CES34 = 74	CES59 = 87	CES84 = 88
CES10 = 75	CES35 = 86	CES60 = 91	CES85 = 79
CES11 = 58	CES36 = 93	CES61 = 84	CES86 = 72
CES12 = 64	CES37 = 81	CES62 = 88	CES87 = 79
CES13 = 43	CES38 = 92	CES63 = 74	CES88 = 82
CES14 = 74	CES39 = 96	CES64 = 69	CES89 = 72
CES15 = 71	CES40 = 92	CES65 = 66	CES90 = 82
CES16 = 47	CES41 = 93	CES66 = 62	CES91 = 79
CES17 = 50	CES42 = 83	CES67 = 60	CES92 = 63
CES18 = 56	CES43 = 79	CES68 = 68	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 76	CES94 = 56
CES20 = 65	CES45 = 86	CES70 = 61	CES95 = 70
CES21 = 86	CES46 = 83	CES71 = 55	CES96 = 79
CES22 = 79	CES47 = 85	CES72 = 85	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 53	CES98 = 78
CES24 = 91	CES49 = 81	CES74 = 95	CES99 = 68
CES25 = 72	CES50 = 88	CES75 = 57	



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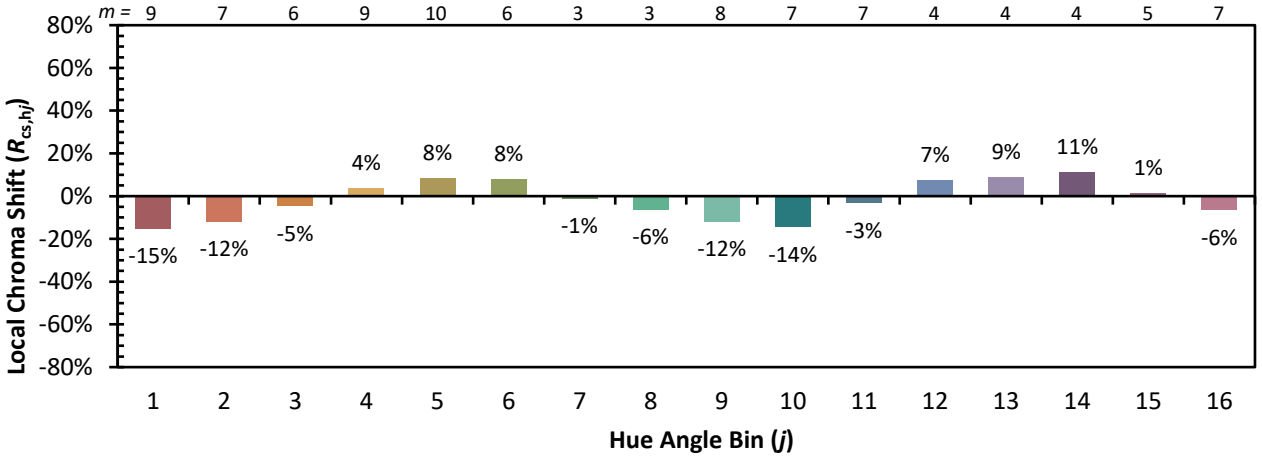
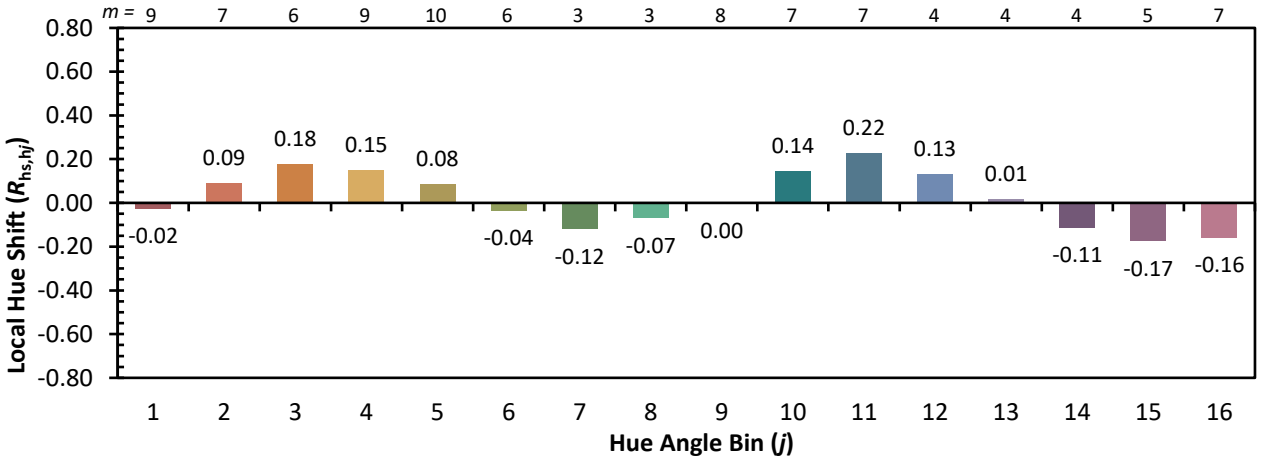
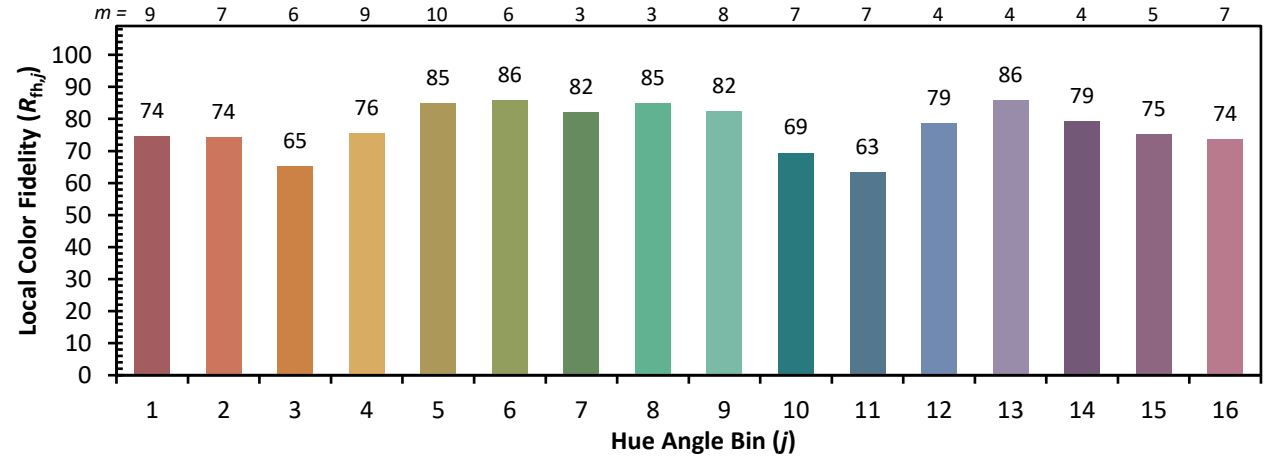
Color Rendition by Hue-Angle Bin







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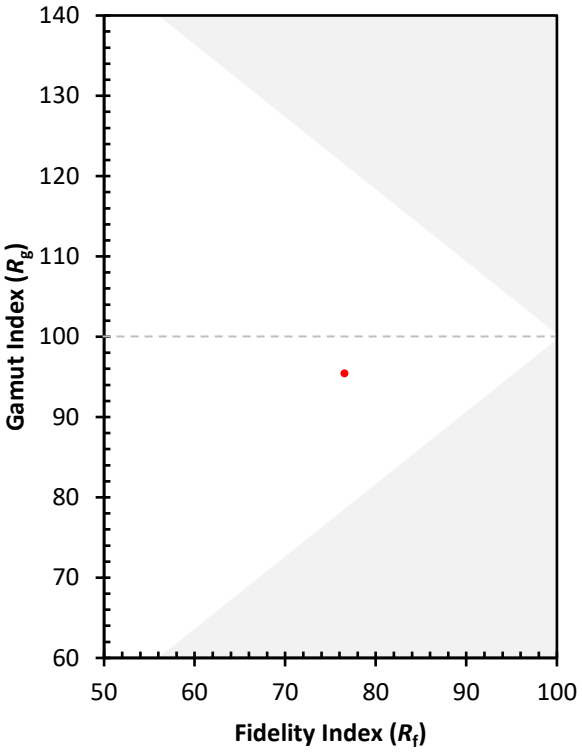
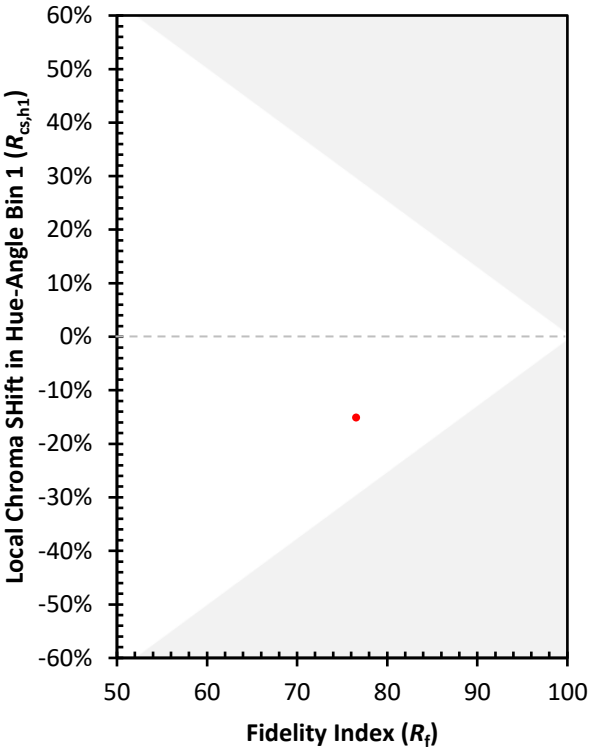
Measure Comparisons





(END OF REPORT)