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: P832842

Luminaire Tested: **TTN-D0-740-U-MQ-CG-UPL3**

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:	P832842
	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-D0-740-U-MQ-CG-UPL3
Description:	TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
	4000K, 70 CRI LEDS AND MEDIUM DISTRIBUTION WITH CLEAR GLASS
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2044.7 lumens
Efficiency:	N/A
Efficacy:	115.5 lumens/watt
Luminous Opening:	Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification:	Type V - Short
BUG Rating:	B1 - U4 - G1

Input Watts (W):	17.7
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: P832842
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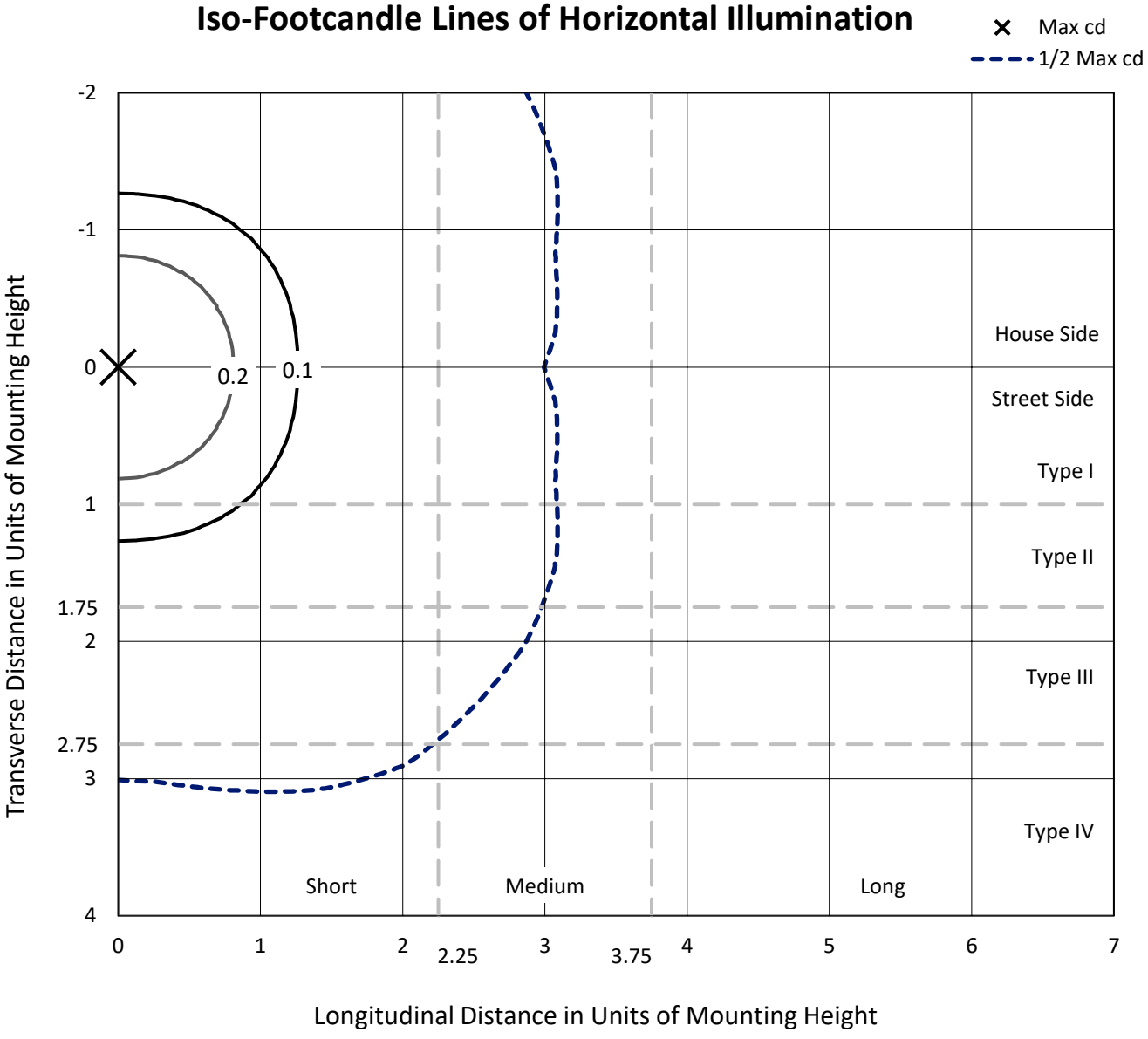
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 0.5 fc
Type V - Short - N/A

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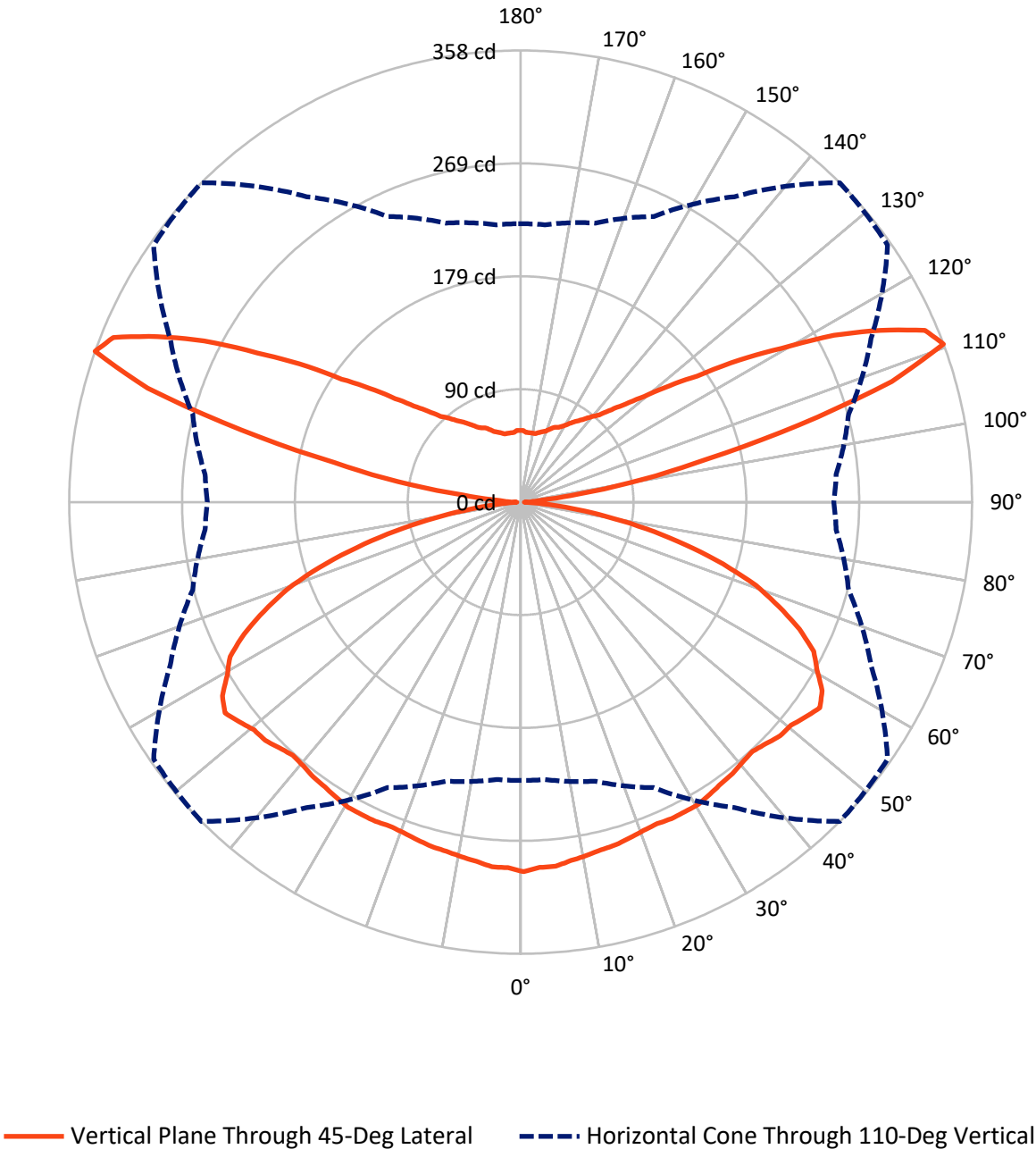
Luminous Intensity Polar Plot



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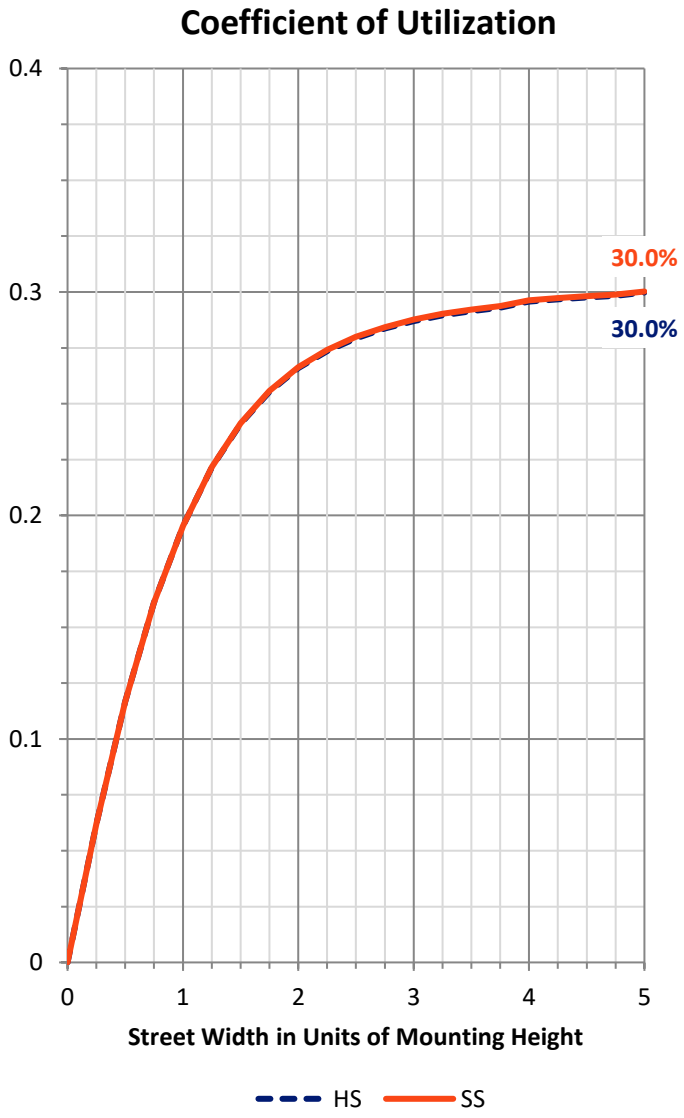
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	616.6	405.8	1022.3
	% Fixture	30.2	19.8	50.0
Street Side	Lumens	616.6	405.8	1022.3
	% Fixture	30.2	19.8	50.0
Total	Lumens	1233.1	811.5	2044.7
	% Fixture	60.3	39.7	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.5	1.3
10°-20°	79.6	3.9
20°-30°	128.1	6.3
30°-40°	171.1	8.4
40°-50°	207.9	10.2
50°-60°	241.6	11.8
60°-70°	222.9	10.9
70°-80°	130.4	6.4
80°-90°	23.9	1.2
90°-100°	18.1	0.9
100°-110°	184.1	9.0
110°-120°	269.1	13.2
120°-130°	156.2	7.6
130°-140°	82.7	4.0
140°-150°	49.1	2.4
150°-160°	30.3	1.5
160°-170°	16.5	0.8
170°-180°	5.4	0.3
0°-90°	1233.1	60.3
0°-180°	2044.7	100.0



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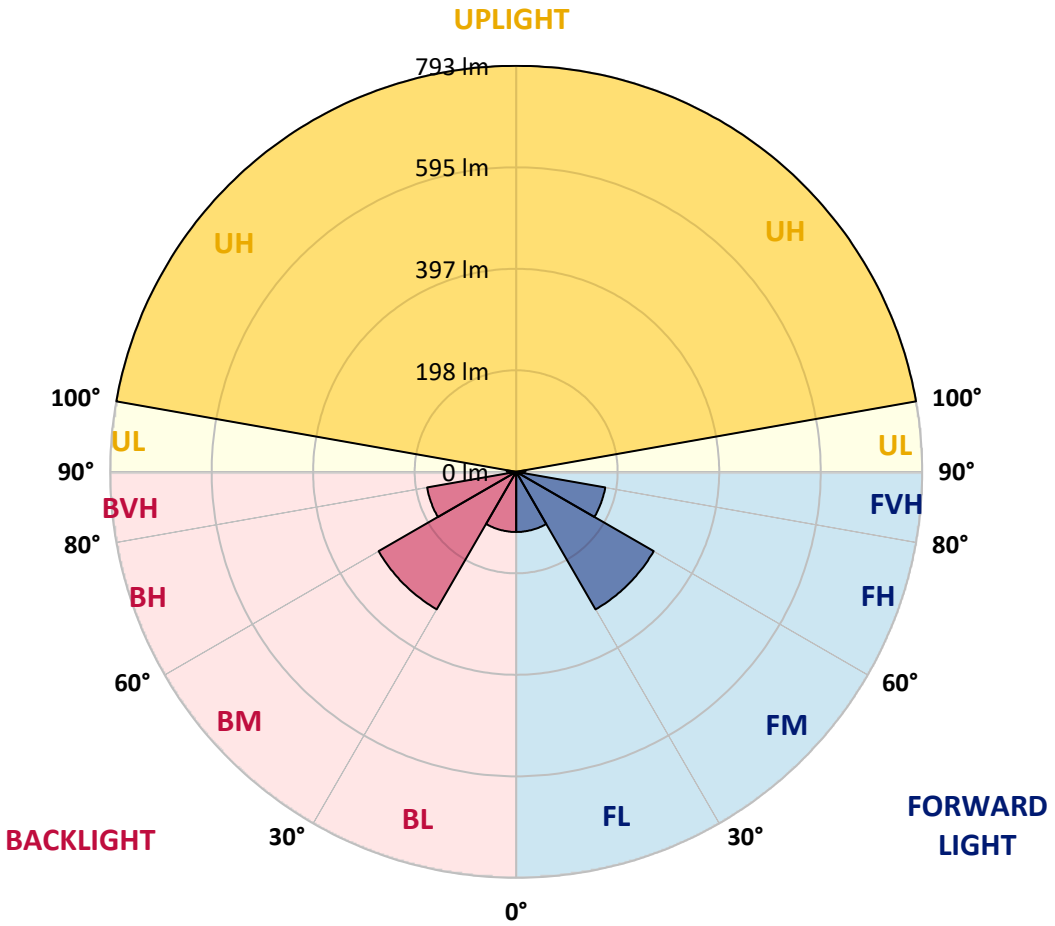
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	117.6	5.8			
FM	(30°-60°)	310.3	15.2			
FH	(60°-80°)	176.7	8.6			G0/660
FVH	(80°-90°)	12.0	0.6			G1/100
BL	(0°-30°)	117.6	5.8	B1/500		
BM	(30°-60°)	310.3	15.2	B1/1000		
BH	(60°-80°)	176.7	8.6	B1/500		G0/660
BVH	(80°-90°)	12.0	0.6			G1/100
UL	(90°-100°)	18.1	0.9		U2/50	
UH	(100°-180°)	793.4	38.8		U4/1000	

BUG Rating: B1-U4-G1
Type V Short



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REPORT NUMBER: P832842
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1
2.5°	290.1	291.1	290.1	290.1	290.1	290.1	290.1	290.1	290.1	290.1	291.1
5°	291.1	291.1	291.1	291.1	290.1	290.1	290.1	290.1	290.1	291.1	291.1
7.5°	288.1	288.1	288.1	288.1	288.1	287.1	288.1	288.1	288.1	288.1	288.1
10°	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1
12.5°	283.1	283.1	283.1	283.1	283.1	283.1	283.1	283.1	283.1	282.1	282.1
15°	281.1	281.1	281.1	281.1	282.1	282.1	281.1	281.1	281.1	281.1	281.1
17.5°	279.1	279.1	279.1	279.1	280.1	280.1	280.1	279.1	279.1	279.1	279.1
20°	277.1	277.1	277.1	277.1	278.1	278.1	278.1	278.1	278.1	277.1	277.1
22.5°	276.1	276.1	276.1	276.1	277.1	277.1	277.1	277.1	276.1	276.1	276.1
25°	275.1	276.1	276.1	276.1	277.1	278.1	278.1	277.1	276.1	275.1	275.1
27.5°	276.1	276.1	276.1	277.1	277.1	278.1	278.1	277.1	276.1	276.1	276.1
30°	275.1	275.1	275.1	276.1	277.1	278.1	277.1	277.1	276.1	275.1	275.1
32.5°	273.1	273.1	274.1	275.1	276.1	276.1	276.1	275.1	274.1	273.1	273.1
35°	271.1	271.1	271.1	272.1	274.1	274.1	274.1	273.1	272.1	271.1	270.1
37.5°	268.1	269.1	269.1	271.1	272.1	273.1	272.1	271.1	269.1	268.1	268.1
40°	266.1	266.1	267.1	269.1	271.1	271.1	270.1	269.1	267.1	266.1	266.1
42.5°	263.1	263.1	265.1	267.1	270.1	270.1	269.1	267.1	265.1	263.1	263.1
45°	263.1	263.1	265.1	269.1	271.1	273.1	271.1	269.1	265.1	263.1	262.1
47.5°	264.1	264.1	266.1	271.1	275.1	277.1	274.1	270.1	266.1	264.1	263.1
50°	262.1	263.1	267.1	272.1	277.1	278.1	277.1	271.1	267.1	262.1	262.1
52.5°	263.1	263.1	268.1	276.1	281.1	283.1	281.1	276.1	267.1	262.1	262.1
55°	261.1	260.1	267.1	276.1	284.1	288.1	284.1	276.1	266.1	260.1	259.1
57.5°	252.1	252.1	261.1	270.1	280.1	282.1	279.1	270.1	260.1	252.1	250.1
60°	240.1	241.1	250.1	260.1	269.1	270.1	268.1	260.1	250.1	241.1	238.1
62.5°	227.1	229.1	238.1	248.1	259.1	261.1	258.1	248.1	236.1	230.1	225.1
65°	208.1	211.1	221.1	232.1	244.1	243.1	243.1	231.1	222.1	212.1	207.1
67.5°	187.1	190.1	197.1	212.1	222.1	221.1	220.1	212.1	197.1	190.1	187.1
70°	164.1	166.1	173.1	188.1	197.1	198.1	195.1	187.1	173.1	168.1	163.1
72.5°	137.0	138.0	148.0	160.0	169.1	168.1	167.1	160.0	147.0	142.0	136.0
75°	108.0	109.0	118.0	129.0	136.0	135.0	134.0	129.0	118.0	112.0	107.0
77.5°	81.0	80.0	89.0	97.0	101.0	102.0	100.0	96.0	88.0	83.0	80.0
80°	53.0	52.0	60.0	66.0	69.0	69.0	68.0	65.0	59.0	55.0	53.0
82.5°	30.0	29.0	34.0	38.0	41.0	40.0	39.0	37.0	34.0	31.0	29.0
85°	11.0	11.0	14.0	16.0	18.0	18.0	17.0	16.0	13.0	12.0	11.0
87.5°	1.0	1.0	2.0	3.0	3.0	3.0	2.0	2.0	1.0	1.0	1.0
90°	6.9	6.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3	6.9	6.9
92.5°	6.9	6.9	6.9	9.7	11.1	9.7	11.1	8.3	8.3	6.9	6.9
95°	8.3	8.3	9.7	12.5	15.3	16.7	16.7	9.7	9.7	8.3	8.3
97.5°	11.1	12.5	12.5	15.3	25.0	45.8	27.8	13.9	13.9	12.5	11.1
100°	18.0	19.4	19.4	34.7	73.6	98.6	70.8	36.1	26.4	19.4	19.4
102.5°	58.3	61.1	75.0	112.5	166.6	151.3	127.7	120.8	83.3	66.6	63.9
105°	148.6	147.2	158.3	187.4	233.3	229.1	211.0	191.6	165.2	152.7	152.7
107.5°	195.8	195.8	205.5	230.5	265.2	309.6	313.8	248.5	218.0	204.1	202.7
110°	220.8	220.8	229.1	249.9	295.7	358.2	355.4	306.8	269.4	251.3	248.5

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Scaled Data Report

REPORT NUMBER: P832842
CATALOG NUMBER: TTN-D0-740-U-MQ-CG-UPL3

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	*226.3*	227.7	238.8	270.7	320.7	348.5	336.0	316.6	299.9	286.0	283.2
115°	*234.6*	234.6	247.1	277.7	305.5	316.6	302.7	287.4	276.3	270.7	273.5
117.5°	*231.9*	236.0	238.8	255.5	273.5	281.8	274.9	254.1	245.8	243.0	238.8
120°	*215.2*	215.2	218.0	226.3	236.0	240.2	237.4	223.5	216.6	215.2	212.4
122.5°	*191.6*	193.0	191.6	195.8	202.7	206.9	204.1	193.0	190.2	190.2	187.4
125°	*168.0*	168.0	166.6	169.4	173.6	172.2	173.6	168.0	166.6	166.6	165.2
127.5°	*151.3*	149.9	147.2	148.6	149.9	149.9	151.3	145.8	147.2	148.6	147.2
130°	*134.7*	134.7	131.9	131.9	131.9	129.1	131.9	129.1	130.5	131.9	133.3
132.5°	*119.4*	119.4	115.2	113.9	113.9	113.9	115.2	113.9	116.6	119.4	119.4
135°	*106.9*	106.9	102.7	104.1	104.1	102.7	104.1	102.7	105.5	106.9	106.9
137.5°	*97.2*	97.2	94.4	94.4	94.4	93.0	94.4	94.4	95.8	98.6	100.0
140°	*88.9*	88.9	87.5	87.5	86.1	87.5	87.5	87.5	88.9	90.2	90.2
142.5°	*84.7*	83.3	81.9	80.5	81.9	81.9	81.9	80.5	81.9	84.7	84.7
145°	*77.8*	77.8	76.4	76.4	76.4	77.8	76.4	76.4	77.8	77.8	79.1
147.5°	*73.6*	73.6	72.2	73.6	73.6	73.6	73.6	72.2	73.6	73.6	75.0
150°	*72.2*	70.8	69.4	70.8	70.8	69.4	69.4	69.4	69.4	70.8	70.8
152.5°	*68.0*	68.0	66.6	68.0	66.6	66.6	66.6	66.6	66.6	68.0	69.4
155°	*65.3*	65.3	63.9	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
157.5°	*62.5*	63.9	62.5	62.5	62.5	62.5	62.5	62.5	62.5	63.9	63.9
160°	*61.1*	61.1	61.1	61.1	59.7	59.7	59.7	61.1	61.1	61.1	62.5
162.5°	*59.7*	59.7	59.7	59.7	58.3	58.3	58.3	58.3	59.7	59.7	61.1
165°	*59.7*	58.3	58.3	58.3	56.9	56.9	56.9	56.9	58.3	59.7	58.3
167.5°	*56.9*	56.9	56.9	56.9	56.9	55.5	55.5	56.9	56.9	56.9	58.3
170°	*56.9*	56.9	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	56.9
172.5°	*56.9*	56.9	56.9	56.9	55.5	55.5	55.5	55.5	55.5	56.9	56.9
175°	*56.9*	56.9	56.9	56.9	55.5	55.5	55.5	56.9	56.9	56.9	55.5
177.5°	*56.9*	56.9	56.9	56.9	55.5	56.9	56.9	56.9	56.9	56.9	56.9
180°	*56.9*	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9

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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: SP1-2411-284-2

Test Date: 11/20/2024

Luminaire Tested: TTN-D0-740-U-WQ

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

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

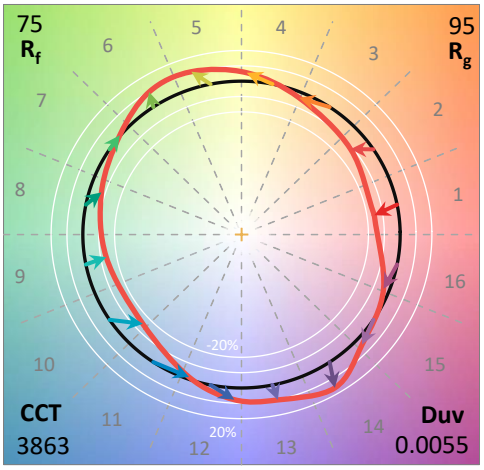
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2411-284-2
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	11/20/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**TTN-D0-740-U-WQ**
Description:	TOPTIER NANO LED PARKING GARAGE LUMINAIRE. 4000K, 70 CRI LEDS AND WIDE DISTRIBUTION

Spectral Parameters

CCT (K):	3863
CIE u':	0.2247
CIE v':	0.5111
Duv:	0.0055
CIE x:	0.3911
CIE y:	0.3954
CIE z:	0.2136
Peak Wavelength (nm):	448
Dominant Wavelength (nm):	577
Purity:	36.03443
Rf:	74.7
Rg:	95.4

CRI (Ra):	71.9
R1:	69.4
R2:	76.9
R3:	83.3
R4:	72.7
R5:	68.4
R6:	67.5
R7:	82.0
R8:	55.3
R9:	-23.5
R10:	45.4
R11:	68.7
R12:	38.7
R13:	70.0
R14:	90.3
R15:	62.1



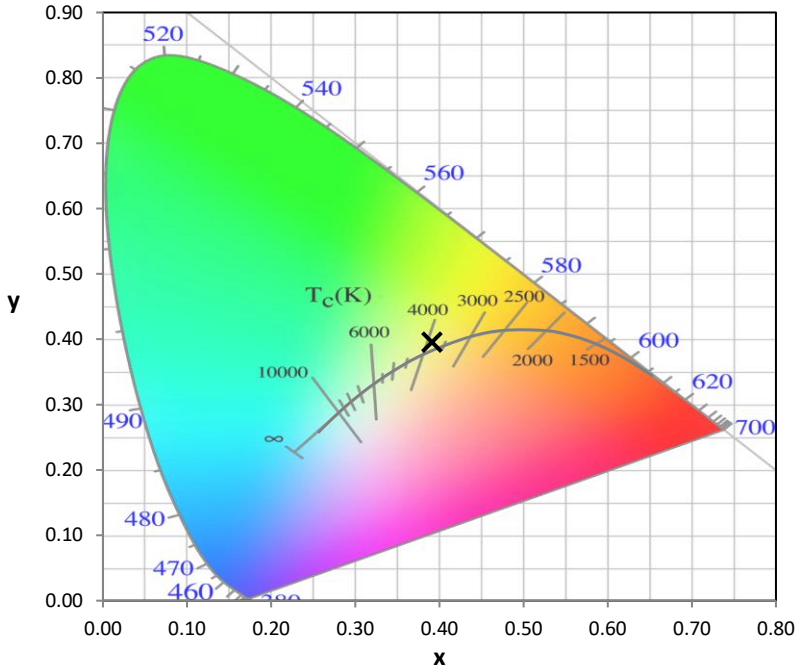
Test Conditions

Stabilization Time:	37M
Operation Time:	1H 37M
Sphere Temperature (°C):	25.0

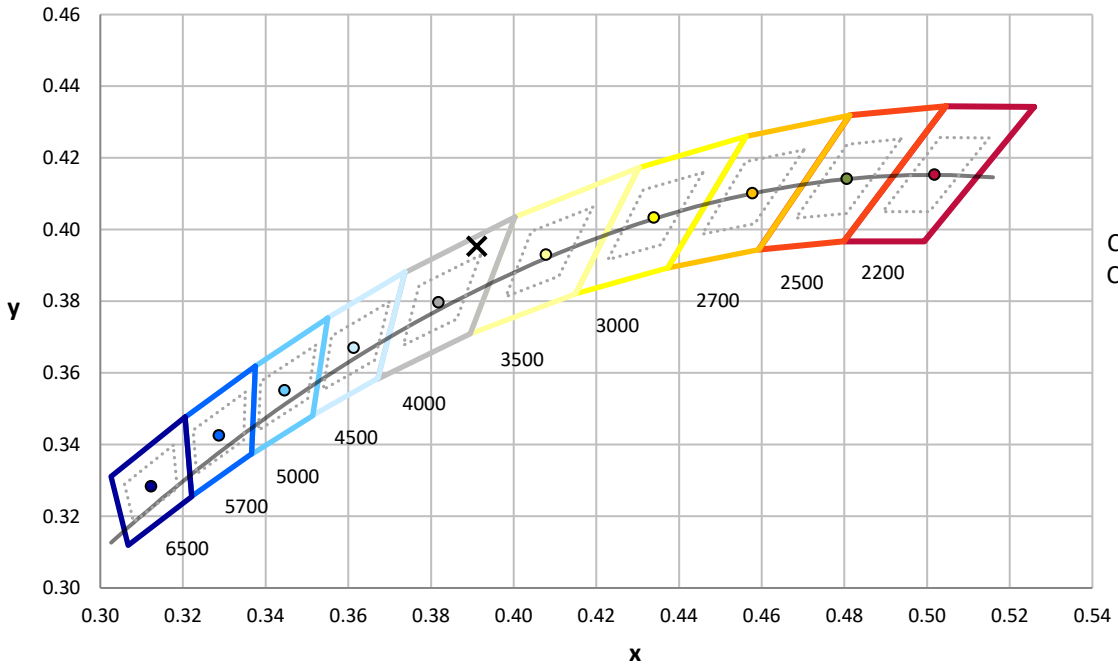
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2411-284-2

CIE 1931 Chromaticity Diagram



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

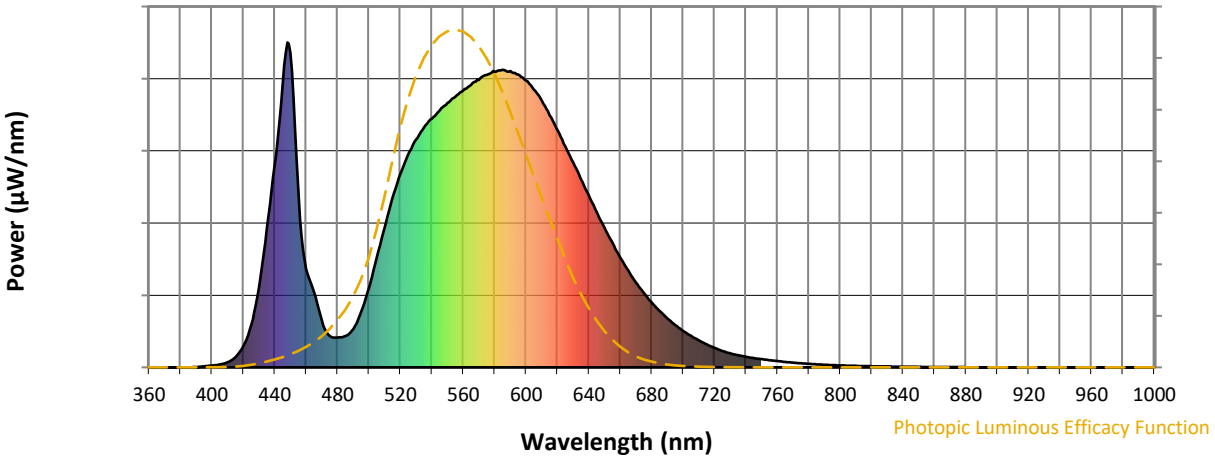


CCT = 3863K
CIE x = 0.3911
CIE y = 0.3954
Duv = 0.0055

Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2411-284-2

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	118	NR	620	730	NR	750	25	NR	880	1	NR
365	0	NR	495	170	NR	625	680	NR	755	22	NR	885	0	NR
370	0	NR	500	245	NR	630	630	NR	760	19	NR	890	0	NR
375	0	NR	505	338	NR	635	579	NR	765	17	NR	895	0	NR
380	0	NR	510	431	NR	640	529	NR	770	14	NR	900	0	NR
385	0	NR	515	521	NR	645	477	NR	775	13	NR	905	0	NR
390	1	NR	520	596	NR	650	429	NR	780	11	NR	910	0	NR
395	3	NR	525	655	NR	655	383	NR	785	9	NR	915	0	NR
400	6	NR	530	701	NR	660	338	NR	790	8	NR	920	0	NR
405	9	NR	535	739	NR	665	298	NR	795	7	NR	925	0	NR
410	16	NR	540	766	NR	670	261	NR	800	6	NR	930	0	NR
415	32	NR	545	791	NR	675	228	NR	805	5	NR	935	0	NR
420	65	NR	550	813	NR	680	200	NR	810	5	NR	940	0	NR
425	131	NR	555	833	NR	685	173	NR	815	4	NR	945	0	NR
430	245	NR	560	852	NR	690	151	NR	820	3	NR	950	0	NR
435	432	NR	565	870	NR	695	130	NR	825	3	NR	955	0	NR
440	622	NR	570	885	NR	700	112	NR	830	3	NR	960	0	NR
445	870	NR	575	900	NR	705	97	NR	835	2	NR	965	0	NR
450	969	NR	580	911	NR	710	83	NR	840	2	NR	970	0	NR
455	544	NR	585	916	NR	715	71	NR	845	2	NR	975	0	NR
460	304	NR	590	912	NR	720	60	NR	850	1	NR	980	0	NR
465	231	NR	595	901	NR	725	51	NR	855	1	NR	985	0	NR
470	142	NR	600	882	NR	730	43	NR	860	1	NR	990	0	NR
475	96	NR	605	855	NR	735	37	NR	865	1	NR	995	0	NR
480	92	NR	610	820	NR	740	32	NR	870	1	NR	1000	0	NR
485	96	NR	615	776	NR	745	29	NR	875	1	NR			

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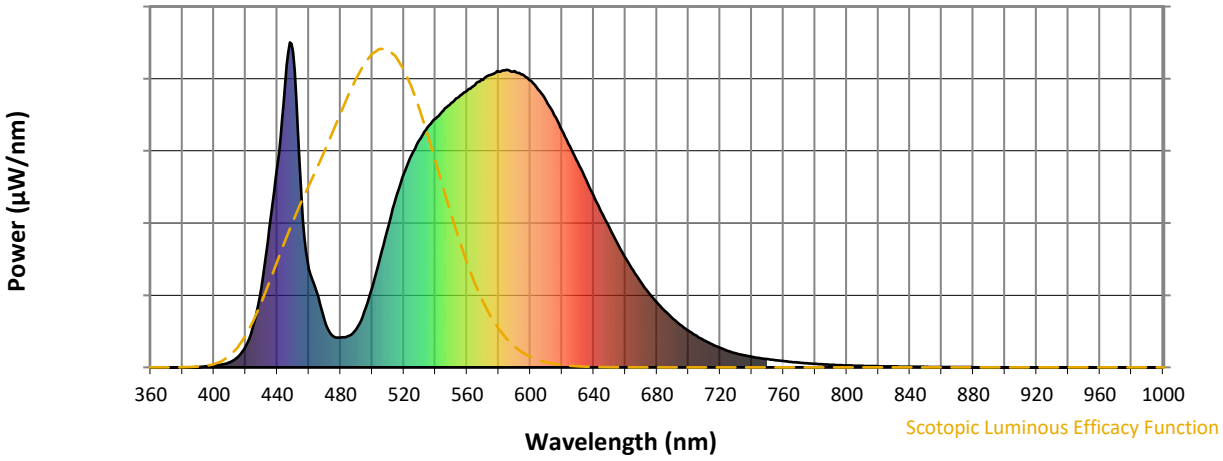
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.45**

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	118	NR	620	730	NR	750	25	NR	880	1	NR
365	0	NR	495	170	NR	625	680	NR	755	22	NR	885	0	NR
370	0	NR	500	245	NR	630	630	NR	760	19	NR	890	0	NR
375	0	NR	505	338	NR	635	579	NR	765	17	NR	895	0	NR
380	0	NR	510	431	NR	640	529	NR	770	14	NR	900	0	NR
385	0	NR	515	521	NR	645	477	NR	775	13	NR	905	0	NR
390	1	NR	520	596	NR	650	429	NR	780	11	NR	910	0	NR
395	3	NR	525	655	NR	655	383	NR	785	9	NR	915	0	NR
400	6	NR	530	701	NR	660	338	NR	790	8	NR	920	0	NR
405	9	NR	535	739	NR	665	298	NR	795	7	NR	925	0	NR
410	16	NR	540	766	NR	670	261	NR	800	6	NR	930	0	NR
415	32	NR	545	791	NR	675	228	NR	805	5	NR	935	0	NR
420	65	NR	550	813	NR	680	200	NR	810	5	NR	940	0	NR
425	131	NR	555	833	NR	685	173	NR	815	4	NR	945	0	NR
430	245	NR	560	852	NR	690	151	NR	820	3	NR	950	0	NR
435	432	NR	565	870	NR	695	130	NR	825	3	NR	955	0	NR
440	622	NR	570	885	NR	700	112	NR	830	3	NR	960	0	NR
445	870	NR	575	900	NR	705	97	NR	835	2	NR	965	0	NR
450	969	NR	580	911	NR	710	83	NR	840	2	NR	970	0	NR
455	544	NR	585	916	NR	715	71	NR	845	2	NR	975	0	NR
460	304	NR	590	912	NR	720	60	NR	850	1	NR	980	0	NR
465	231	NR	595	901	NR	725	51	NR	855	1	NR	985	0	NR
470	142	NR	600	882	NR	730	43	NR	860	1	NR	990	0	NR
475	96	NR	605	855	NR	735	37	NR	865	1	NR	995	0	NR
480	92	NR	610	820	NR	740	32	NR	870	1	NR	1000	0	NR
485	96	NR	615	776	NR	745	29	NR	875	1	NR			

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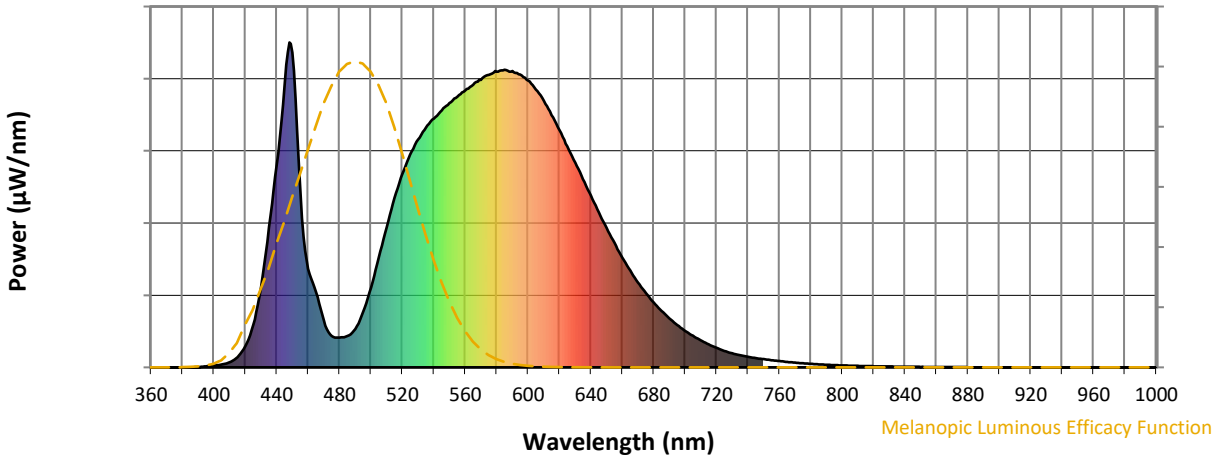
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.72**

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	118	NR	620	730	NR	750	25	NR	880	1	NR
365	0	NR	495	170	NR	625	680	NR	755	22	NR	885	0	NR
370	0	NR	500	245	NR	630	630	NR	760	19	NR	890	0	NR
375	0	NR	505	338	NR	635	579	NR	765	17	NR	895	0	NR
380	0	NR	510	431	NR	640	529	NR	770	14	NR	900	0	NR
385	0	NR	515	521	NR	645	477	NR	775	13	NR	905	0	NR
390	1	NR	520	596	NR	650	429	NR	780	11	NR	910	0	NR
395	3	NR	525	655	NR	655	383	NR	785	9	NR	915	0	NR
400	6	NR	530	701	NR	660	338	NR	790	8	NR	920	0	NR
405	9	NR	535	739	NR	665	298	NR	795	7	NR	925	0	NR
410	16	NR	540	766	NR	670	261	NR	800	6	NR	930	0	NR
415	32	NR	545	791	NR	675	228	NR	805	5	NR	935	0	NR
420	65	NR	550	813	NR	680	200	NR	810	5	NR	940	0	NR
425	131	NR	555	833	NR	685	173	NR	815	4	NR	945	0	NR
430	245	NR	560	852	NR	690	151	NR	820	3	NR	950	0	NR
435	432	NR	565	870	NR	695	130	NR	825	3	NR	955	0	NR
440	622	NR	570	885	NR	700	112	NR	830	3	NR	960	0	NR
445	870	NR	575	900	NR	705	97	NR	835	2	NR	965	0	NR
450	969	NR	580	911	NR	710	83	NR	840	2	NR	970	0	NR
455	544	NR	585	916	NR	715	71	NR	845	2	NR	975	0	NR
460	304	NR	590	912	NR	720	60	NR	850	1	NR	980	0	NR
465	231	NR	595	901	NR	725	51	NR	855	1	NR	985	0	NR
470	142	NR	600	882	NR	730	43	NR	860	1	NR	990	0	NR
475	96	NR	605	855	NR	735	37	NR	865	1	NR	995	0	NR
480	92	NR	610	820	NR	740	32	NR	870	1	NR	1000	0	NR
485	96	NR	615	776	NR	745	29	NR	875	1	NR			

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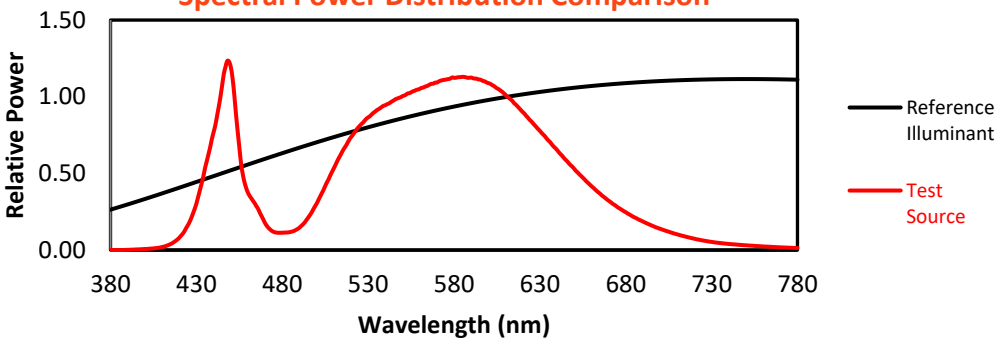
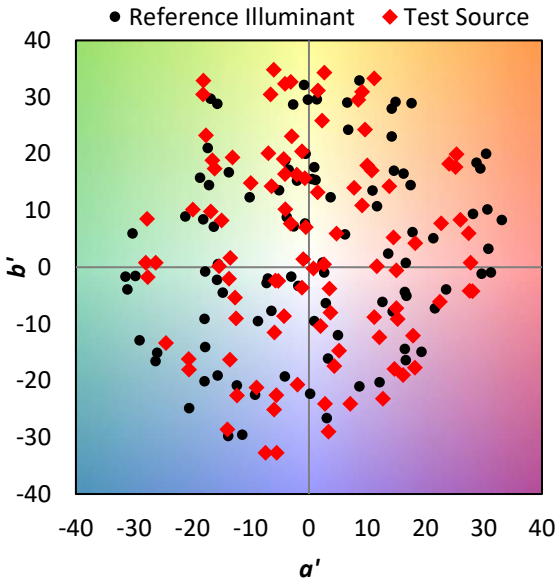
Summary

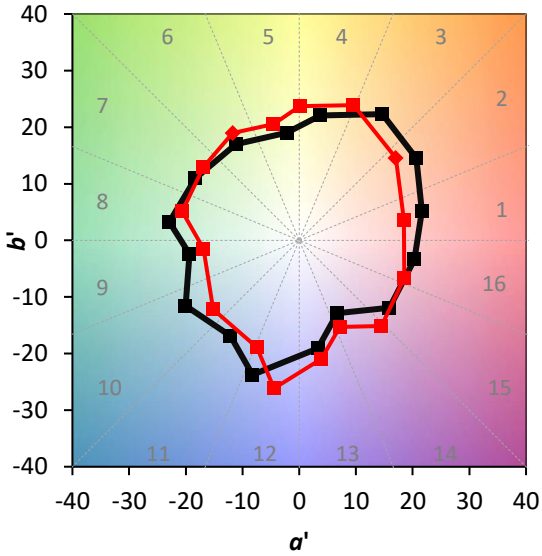
R_f = 74.7
R_g = 95.4
CIE R_a = 71.9
R_9 = -23.5

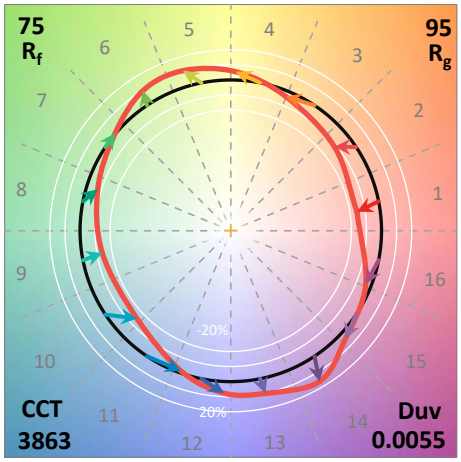
Spectral Power Distribution Comparison

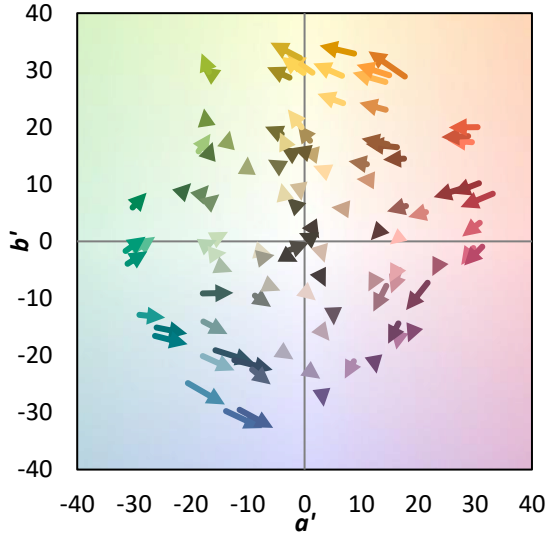


Color Vector Graphics









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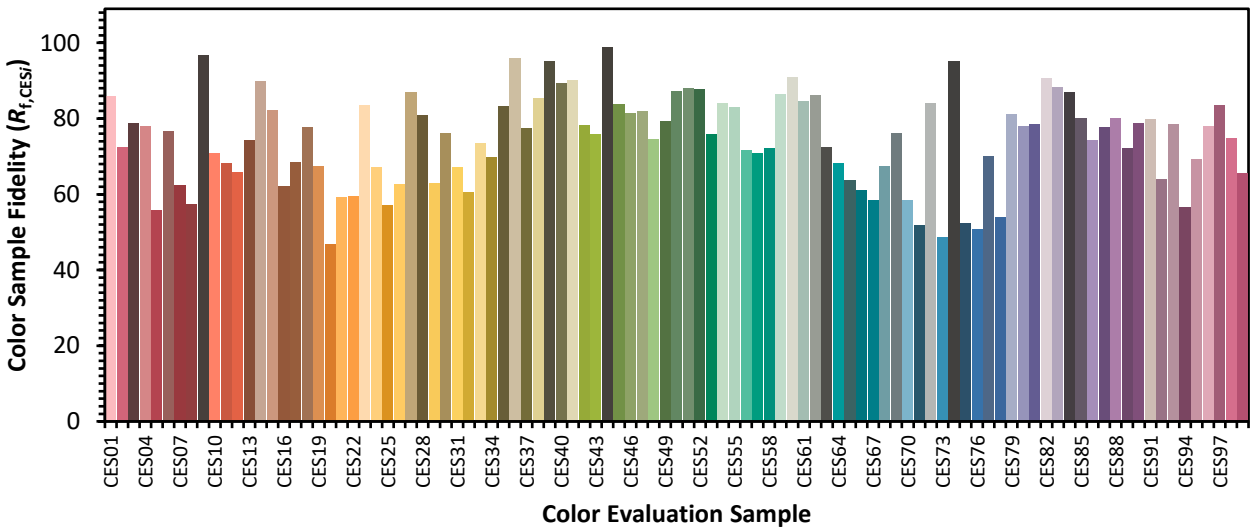
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 63	CES51 = 88	CES76 = 51
CES02 = 61	CES27 = 87	CES52 = 88	CES77 = 70
CES03 = 30	CES28 = 81	CES53 = 76	CES78 = 54
CES04 = 70	CES29 = 63	CES54 = 84	CES79 = 81
CES05 = 47	CES30 = 76	CES55 = 83	CES80 = 78
CES06 = 50	CES31 = 67	CES56 = 72	CES81 = 79
CES07 = 40	CES32 = 61	CES57 = 71	CES82 = 91
CES08 = 39	CES33 = 73	CES58 = 72	CES83 = 88
CES09 = 29	CES34 = 70	CES59 = 86	CES84 = 87
CES10 = 74	CES35 = 83	CES60 = 91	CES85 = 80
CES11 = 57	CES36 = 96	CES61 = 85	CES86 = 74
CES12 = 63	CES37 = 77	CES62 = 86	CES87 = 78
CES13 = 42	CES38 = 85	CES63 = 72	CES88 = 80
CES14 = 74	CES39 = 95	CES64 = 68	CES89 = 72
CES15 = 71	CES40 = 89	CES65 = 64	CES90 = 79
CES16 = 46	CES41 = 90	CES66 = 61	CES91 = 80
CES17 = 49	CES42 = 78	CES67 = 58	CES92 = 64
CES18 = 56	CES43 = 76	CES68 = 67	CES93 = 78
CES19 = 71	CES44 = 99	CES69 = 76	CES94 = 57
CES20 = 65	CES45 = 84	CES70 = 58	CES95 = 69
CES21 = 86	CES46 = 81	CES71 = 52	CES96 = 78
CES22 = 78	CES47 = 82	CES72 = 84	CES97 = 84
CES23 = 92	CES48 = 75	CES73 = 49	CES98 = 75
CES24 = 91	CES49 = 79	CES74 = 95	CES99 = 66
CES25 = 72	CES50 = 87	CES75 = 52	



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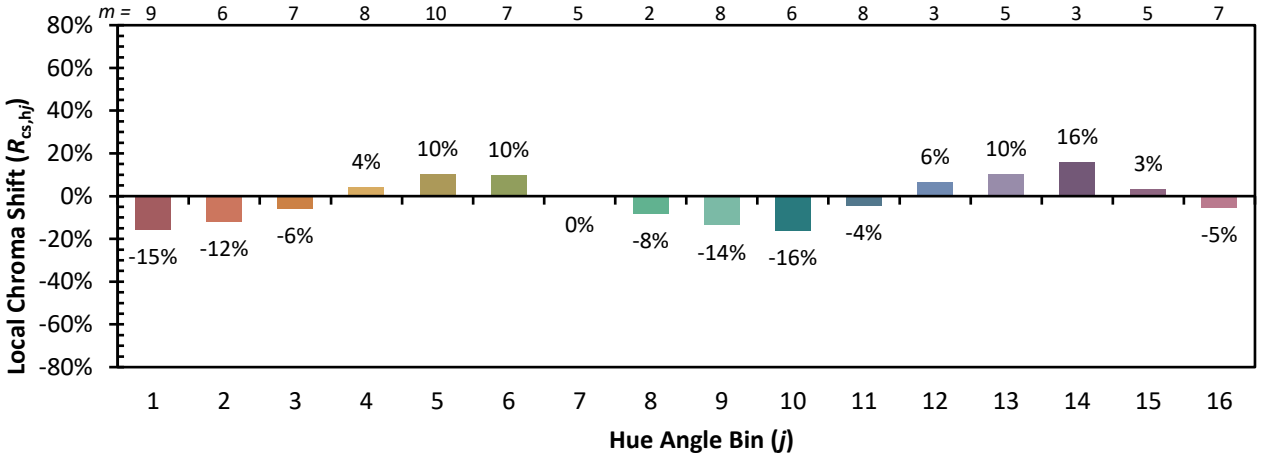
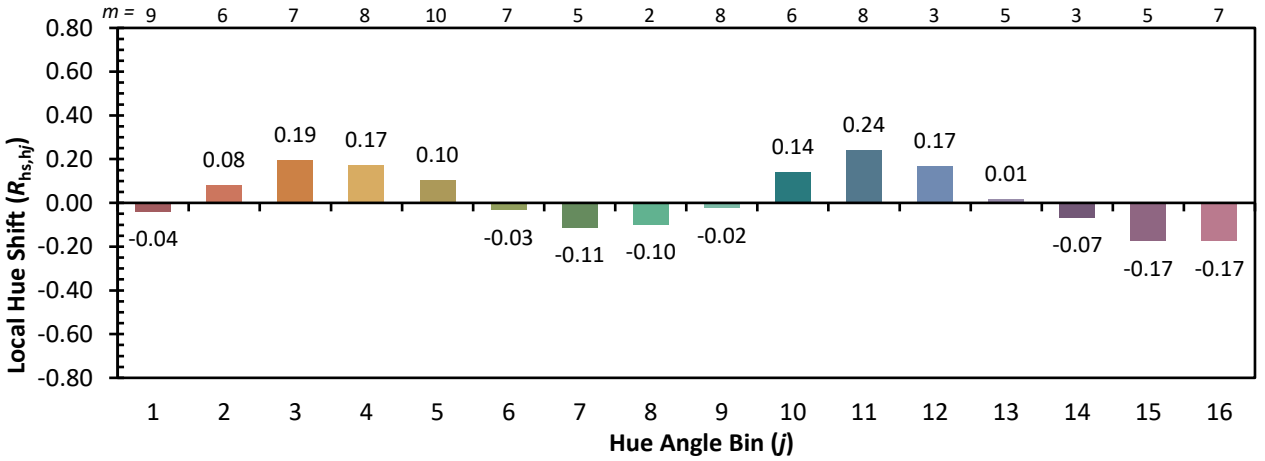
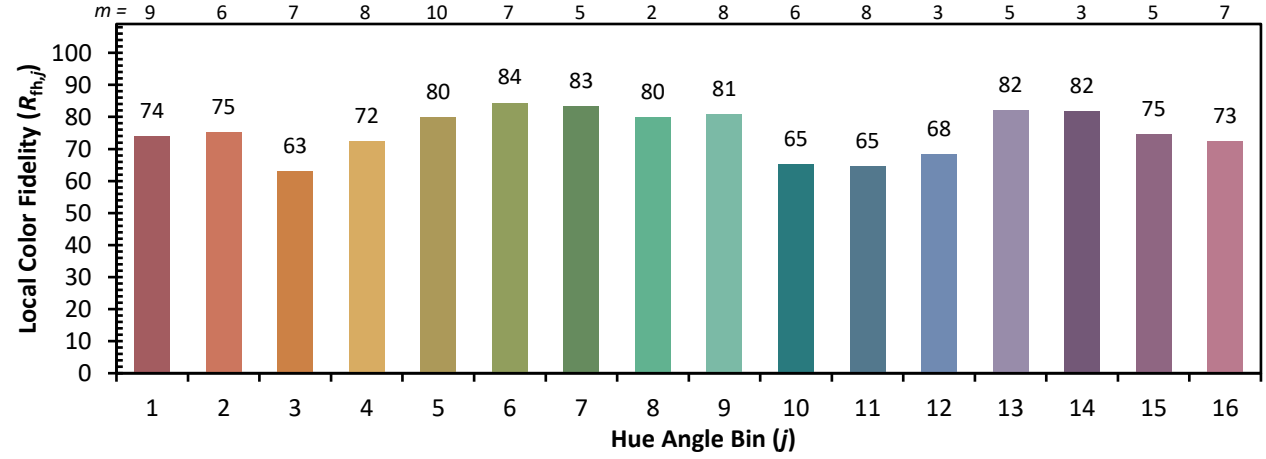
Color Rendition by Hue-Angle Bin







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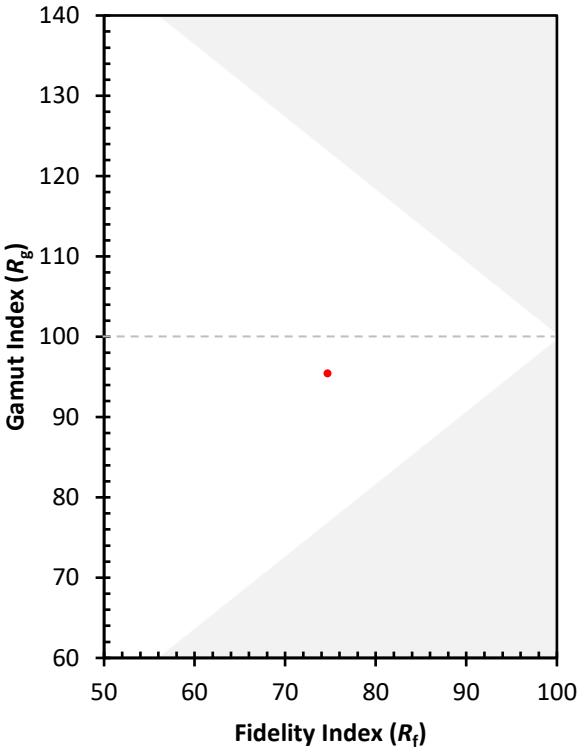
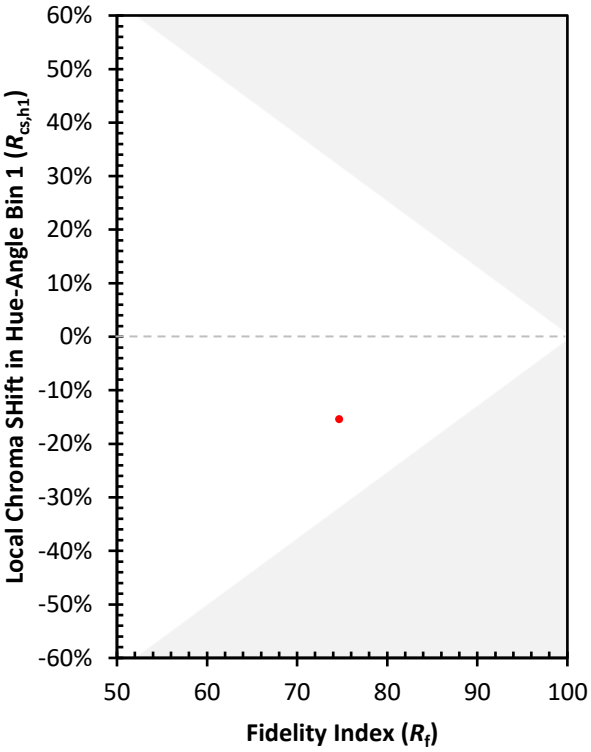
Measure Comparisons





(END OF REPORT)