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: P833201

Luminaire Tested: **TTN-D1-740-U-MQ-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:	P833201
	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-D1-740-U-MQ-CG-UPL2
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:	3993.7 lumens
Efficiency:	N/A
Efficacy:	129.2 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):	30.9
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: P833201
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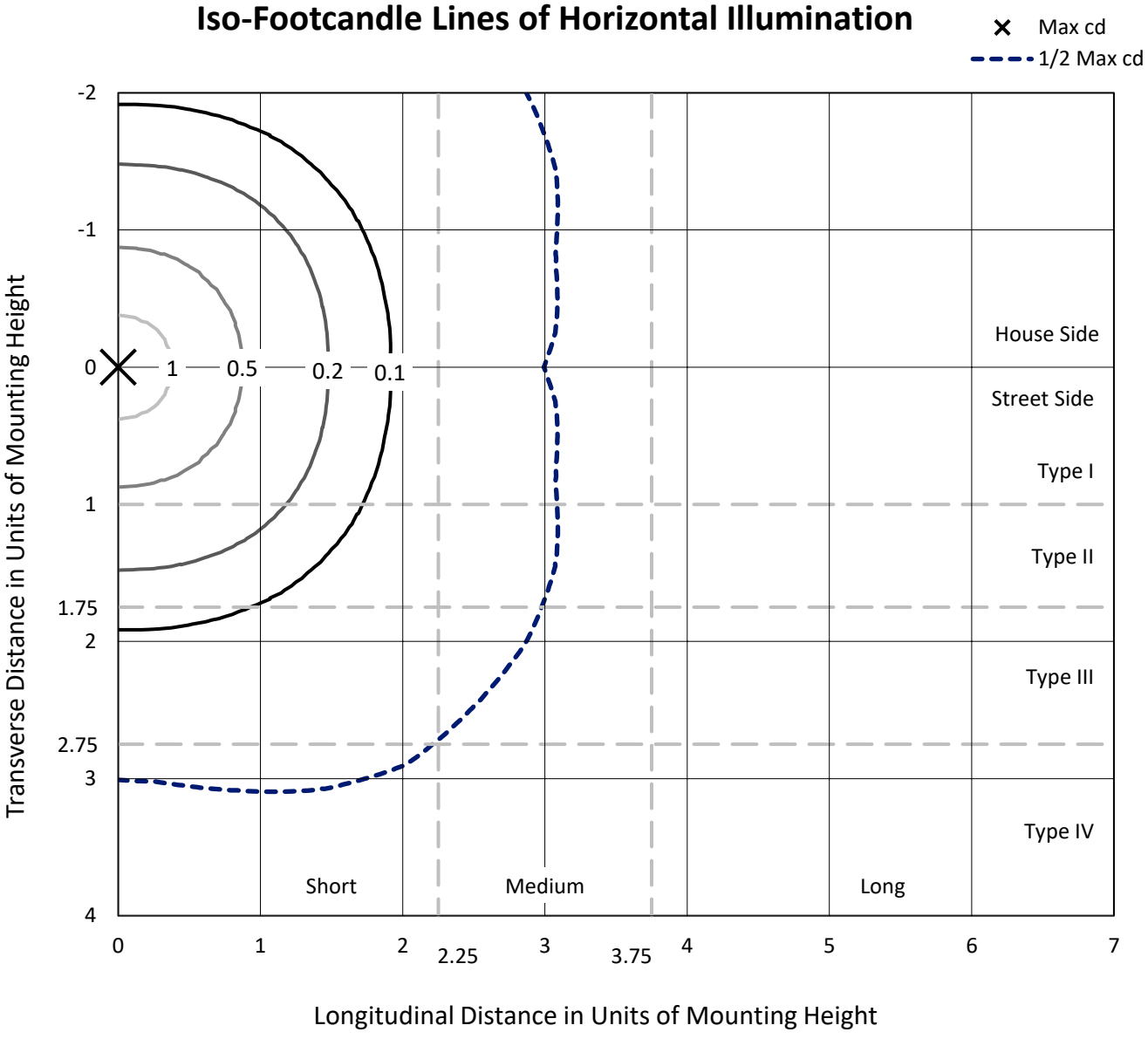
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
Type V - Short - N/A

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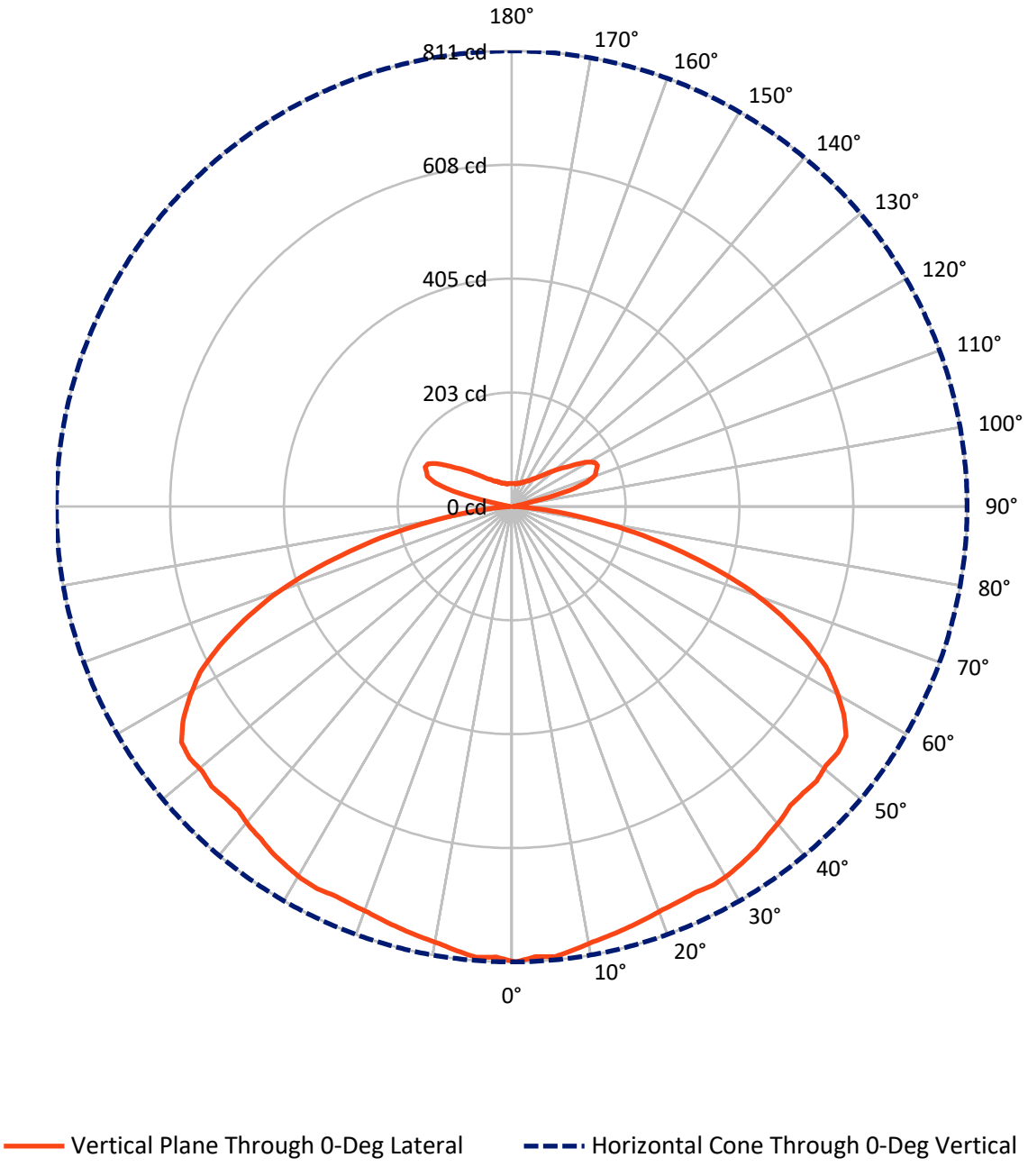
Luminous Intensity Polar Plot



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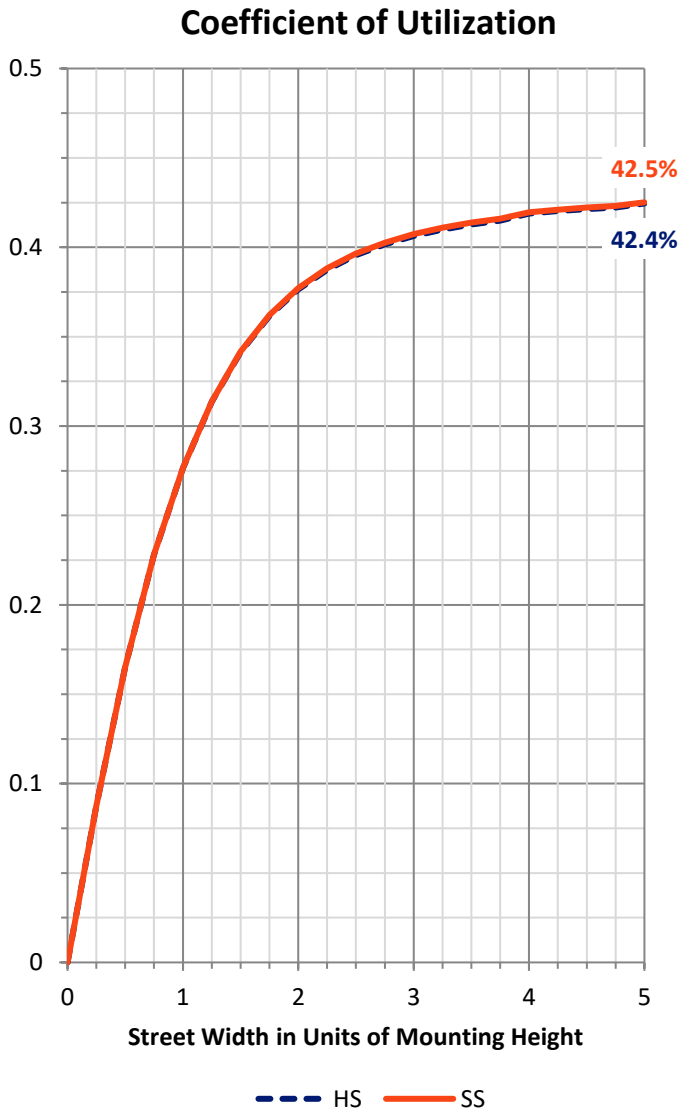
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1704.4	292.5	1996.8
	% Fixture	42.7	7.3	50.0
Street Side	Lumens	1704.4	292.5	1996.8
	% Fixture	42.7	7.3	50.0
Total	Lumens	3408.8	584.9	3993.7
	% Fixture	85.4	14.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	1.9
10°-20°	220.3	5.5
20°-30°	354.3	8.9
30°-40°	473.3	11.9
40°-50°	575.1	14.4
50°-60°	668.2	16.7
60°-70°	616.5	15.4
70°-80°	360.9	9.0
80°-90°	64.0	1.6
90°-100°	13.1	0.3
100°-110°	132.7	3.3
110°-120°	194.0	4.9
120°-130°	112.6	2.8
130°-140°	59.7	1.5
140°-150°	35.4	0.9
150°-160°	21.8	0.5
160°-170°	11.9	0.3
170°-180°	3.9	0.1
0°-90°	3408.8	85.4
0°-180°	3993.7	100.0



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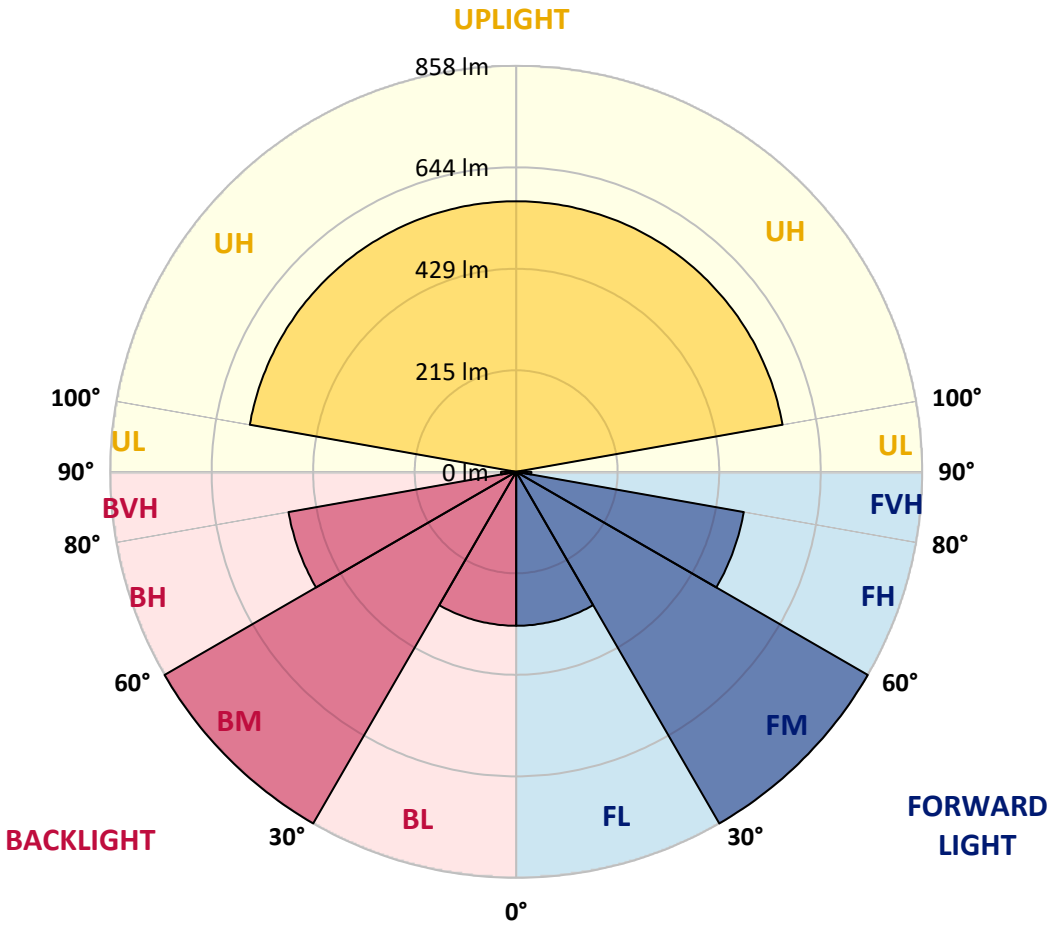
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	325.4	8.1			
FM	(30°-60°)	858.3	21.5			
FH	(60°-80°)	488.7	12.2			G0/660
FVH	(80°-90°)	32.0	0.8			G1/100
BL	(0°-30°)	325.4	8.1	B1/500		
BM	(30°-60°)	858.3	21.5	B1/1000		
BH	(60°-80°)	488.7	12.2	B1/500		G0/660
BVH	(80°-90°)	32.0	0.8			G1/100
UL	(90°-100°)	13.1	0.3		U2/50	
UH	(100°-180°)	571.8	14.3		U4/1000	

BUG Rating: B1-U4-G1
Type V Short



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REPORT NUMBER: P833201
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8
2.5°	802.5	805.2	802.5	802.5	802.5	802.5	802.5	802.5	802.5	802.5	805.2
5°	805.2	805.2	805.2	805.2	802.5	802.5	802.5	802.5	802.5	805.2	805.2
7.5°	796.9	796.9	796.9	796.9	796.9	794.2	796.9	796.9	796.9	796.9	796.9
10°	788.6	788.6	788.6	788.6	788.6	788.6	788.6	788.6	788.6	788.6	788.6
12.5°	783.1	783.1	783.1	783.1	783.1	783.1	783.1	783.1	783.1	780.3	780.3
15°	777.6	777.6	777.6	777.6	780.3	780.3	777.6	777.6	777.6	777.6	777.6
17.5°	772.0	772.0	772.0	772.0	774.8	774.8	774.8	772.0	772.0	772.0	772.0
20°	766.5	766.5	766.5	766.5	769.3	769.3	769.3	769.3	769.3	766.5	766.5
22.5°	763.7	763.7	763.7	763.7	766.5	766.5	766.5	766.5	763.7	763.7	763.7
25°	760.9	763.7	763.7	763.7	766.5	769.3	769.3	766.5	763.7	760.9	760.9
27.5°	763.7	763.7	763.7	766.5	766.5	769.3	769.3	766.5	763.7	763.7	763.7
30°	760.9	760.9	760.9	763.7	766.5	769.3	766.5	766.5	763.7	760.9	760.9
32.5°	755.4	755.4	758.2	760.9	763.7	763.7	763.7	760.9	758.2	755.4	755.4
35°	749.9	749.9	749.9	752.6	758.2	758.2	758.2	755.4	752.6	749.9	747.1
37.5°	741.6	744.3	744.3	749.9	752.6	755.4	752.6	749.9	744.3	741.6	741.6
40°	736.0	736.0	738.8	744.3	749.9	749.9	747.1	744.3	738.8	736.0	736.0
42.5°	727.7	727.7	733.3	738.8	747.1	747.1	744.3	738.8	733.3	727.7	727.7
45°	727.7	727.7	733.3	744.3	749.9	755.4	749.9	744.3	733.3	727.7	725.0
47.5°	730.5	730.5	736.0	749.9	760.9	766.5	758.2	747.1	736.0	730.5	727.7
50°	725.0	727.7	738.8	752.6	766.5	769.3	766.5	749.9	738.8	725.0	725.0
52.5°	727.7	727.7	741.6	763.7	777.6	783.1	777.6	763.7	738.8	725.0	725.0
55°	722.2	719.4	738.8	763.7	785.9	796.9	785.9	763.7	736.0	719.4	716.7
57.5°	697.3	697.3	722.2	747.1	774.8	780.3	772.0	747.1	719.4	697.3	691.8
60°	664.1	666.9	691.8	719.4	744.3	747.1	741.6	719.4	691.8	666.9	658.6
62.5°	628.1	633.7	658.6	686.2	716.7	722.2	713.9	686.2	653.0	636.4	622.6
65°	575.6	583.9	611.5	642.0	675.2	672.4	672.4	639.2	614.3	586.6	572.8
67.5°	517.4	525.7	545.1	586.6	614.3	611.5	608.8	586.6	545.1	525.7	517.4
70°	453.8	459.3	478.7	520.2	545.1	547.9	539.6	517.4	478.7	464.9	451.0
72.5°	379.1	381.9	409.5	442.7	467.6	464.9	462.1	442.7	406.8	392.9	376.3
75°	298.8	301.6	326.5	357.0	376.3	373.6	370.8	357.0	326.5	309.9	296.1
77.5°	224.1	221.4	246.3	268.4	279.5	282.2	276.7	265.6	243.5	229.7	221.4
80°	146.7	143.9	166.0	182.6	190.9	190.9	188.2	179.9	163.3	152.2	146.7
82.5°	83.0	80.2	94.1	105.1	113.5	110.7	107.9	102.4	94.1	85.8	80.2
85°	30.4	30.4	38.7	44.3	49.8	49.8	47.0	44.3	36.0	33.2	30.4
87.5°	2.8	2.8	5.5	8.3	8.3	8.3	5.5	5.5	2.8	2.8	2.8
90°	5.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0
92.5°	5.0	5.0	5.0	7.0	8.0	7.0	8.0	6.0	6.0	5.0	5.0
95°	6.0	6.0	7.0	9.0	11.0	12.0	12.0	7.0	7.0	6.0	6.0
97.5°	8.0	9.0	9.0	11.0	18.0	33.0	20.0	10.0	10.0	9.0	8.0
100°	13.0	14.0	14.0	25.0	53.0	71.1	51.0	26.0	19.0	14.0	14.0
102.5°	42.0	44.0	54.0	81.1	120.1	109.1	92.1	87.1	60.0	48.0	46.0
105°	107.1	106.1	114.1	135.1	168.1	165.1	152.1	138.1	119.1	110.1	110.1
107.5°	141.1	141.1	148.1	166.1	191.1	223.2	226.2	179.1	157.1	147.1	146.1
110°	159.1	159.1	165.1	180.1	213.2	258.2	256.2	221.2	194.1	181.1	179.1

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CATALOG NUMBER: TTN-D1-740-U-MQ-CG-UPL2

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	*163.1*	164.1	172.1	195.1	231.2	251.2	242.2	228.2	216.2	206.2	204.2
115°	*169.1*	169.1	178.1	200.2	220.2	228.2	218.2	207.2	199.2	195.1	197.1
117.5°	*167.1*	170.1	172.1	184.1	197.1	203.2	198.1	183.1	177.1	175.1	172.1
120°	*155.1*	155.1	157.1	163.1	170.1	173.1	171.1	161.1	156.1	155.1	153.1
122.5°	*138.1*	139.1	138.1	141.1	146.1	149.1	147.1	139.1	137.1	137.1	135.1
125°	*121.1*	121.1	120.1	122.1	125.1	124.1	125.1	121.1	120.1	120.1	119.1
127.5°	*109.1*	108.1	106.1	107.1	108.1	108.1	109.1	105.1	106.1	107.1	106.1
130°	*97.1*	97.1	95.1	95.1	95.1	93.1	95.1	93.1	94.1	95.1	96.1
132.5°	*86.1*	86.1	83.1	82.1	82.1	82.1	83.1	82.1	84.1	86.1	86.1
135°	*77.1*	77.1	74.1	75.1	75.1	74.1	75.1	74.1	76.1	77.1	77.1
137.5°	*70.1*	70.1	68.1	68.1	68.1	67.1	68.1	68.1	69.1	71.1	72.1
140°	*64.0*	64.0	63.0	63.0	62.0	63.0	63.0	63.0	64.0	65.0	65.0
142.5°	*61.0*	60.0	59.0	58.0	59.0	59.0	59.0	58.0	59.0	61.0	61.0
145°	*56.0*	56.0	55.0	55.0	55.0	56.0	55.0	55.0	56.0	56.0	57.0
147.5°	*53.0*	53.0	52.0	53.0	53.0	53.0	53.0	52.0	53.0	53.0	54.0
150°	*52.0*	51.0	50.0	51.0	51.0	50.0	50.0	50.0	50.0	51.0	51.0
152.5°	*49.0*	49.0	48.0	49.0	48.0	48.0	48.0	48.0	48.0	49.0	50.0
155°	*47.0*	47.0	46.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
157.5°	*45.0*	46.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	46.0	46.0
160°	*44.0*	44.0	44.0	44.0	43.0	43.0	43.0	44.0	44.0	44.0	45.0
162.5°	*43.0*	43.0	43.0	43.0	42.0	42.0	42.0	42.0	43.0	43.0	44.0
165°	*43.0*	42.0	42.0	42.0	41.0	41.0	41.0	41.0	42.0	43.0	42.0
167.5°	*41.0*	41.0	41.0	41.0	41.0	40.0	40.0	41.0	41.0	41.0	42.0
170°	*41.0*	41.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	41.0
172.5°	*41.0*	41.0	41.0	41.0	40.0	40.0	40.0	40.0	40.0	41.0	41.0
175°	*41.0*	41.0	41.0	41.0	40.0	40.0	40.0	41.0	41.0	41.0	40.0
177.5°	*41.0*	41.0	41.0	41.0	40.0	41.0	41.0	41.0	41.0	41.0	41.0
180°	*41.0*	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0

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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

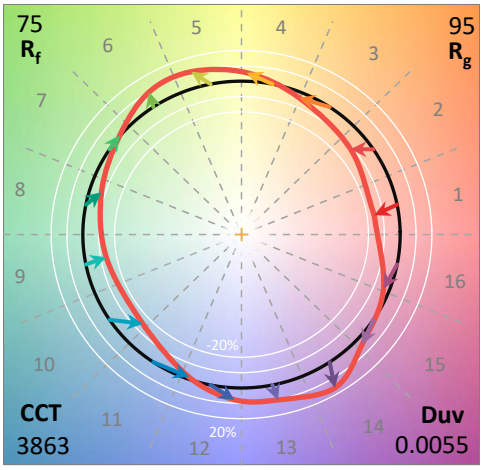
Test Information

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



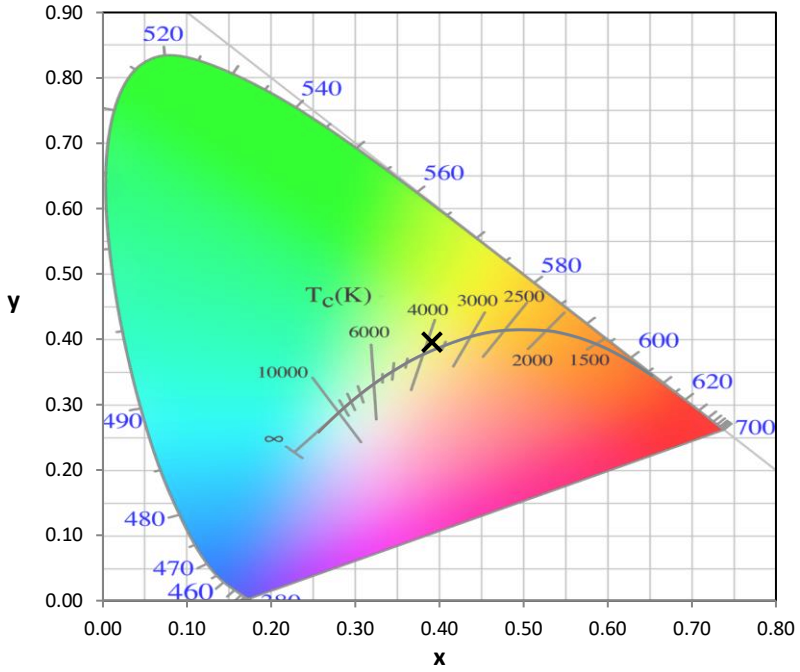
Test Conditions

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

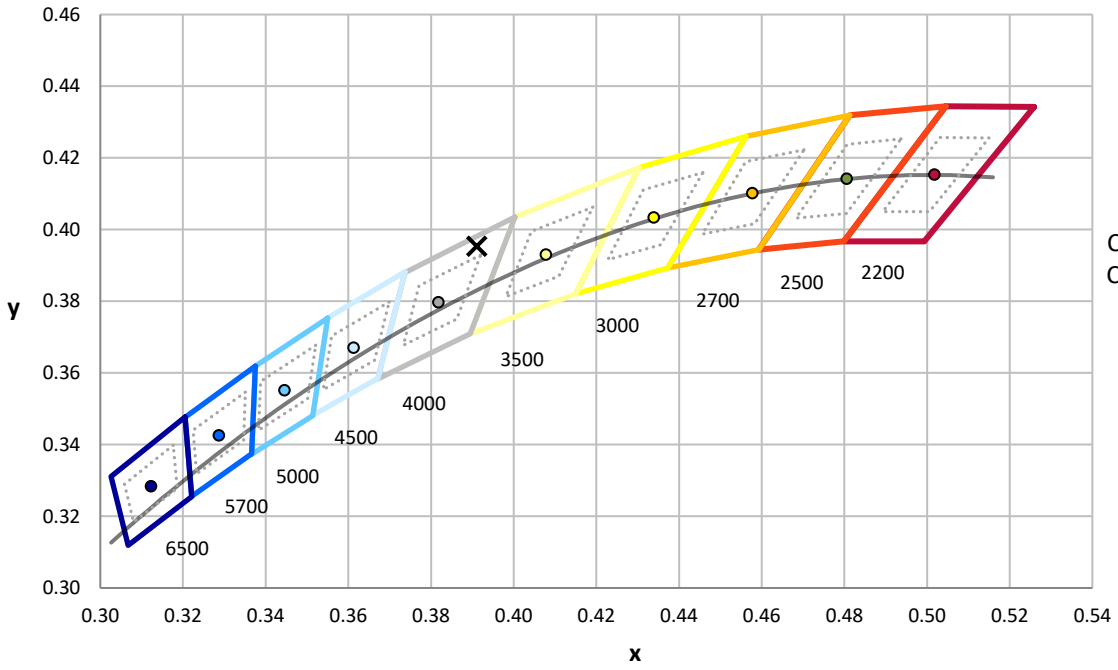
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

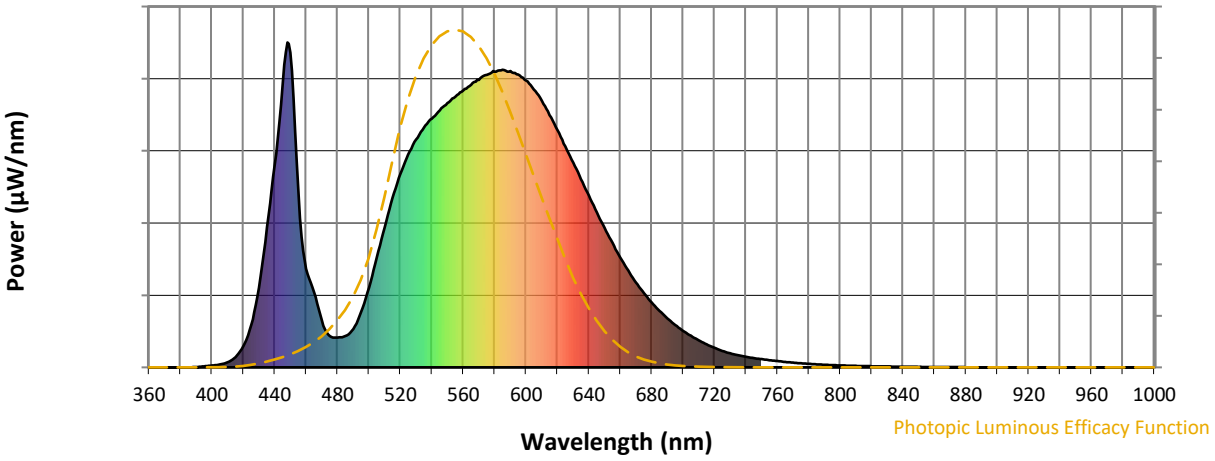


CCT = 3863K
CIE x = 0.3911
CIE y = 0.3954
Duv = 0.0055

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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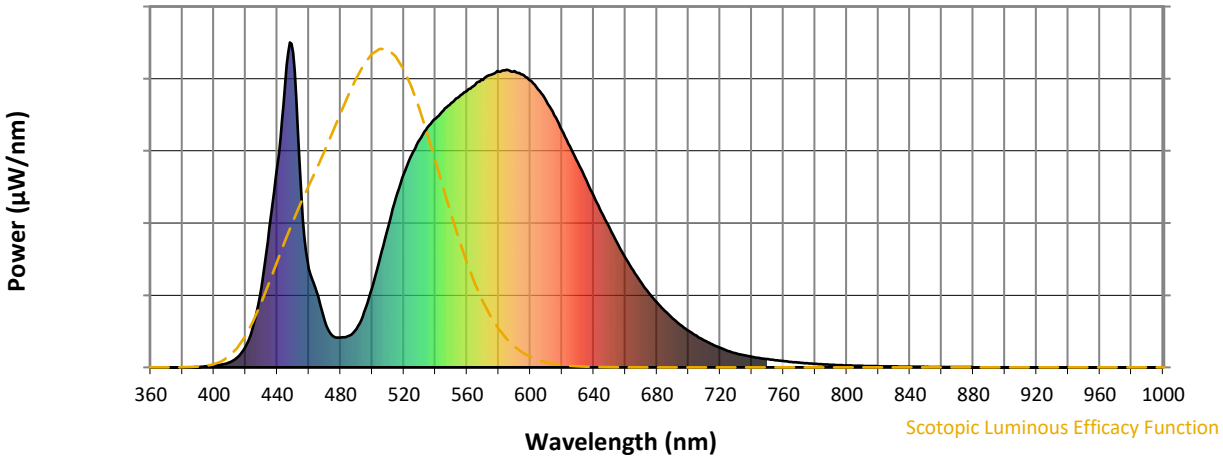
Scotopic Flux vs. Wavelength



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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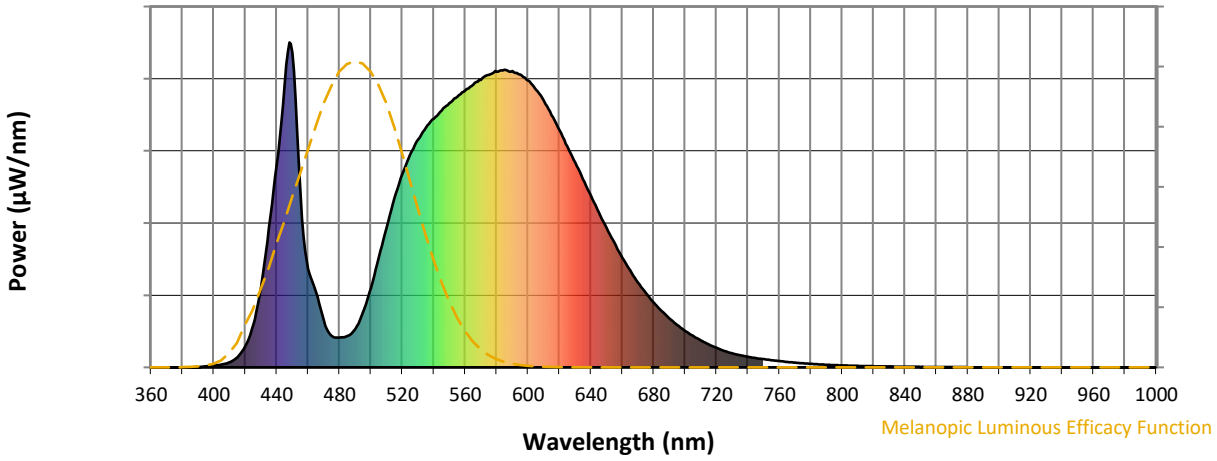
Melanopic Flux vs. Wavelength



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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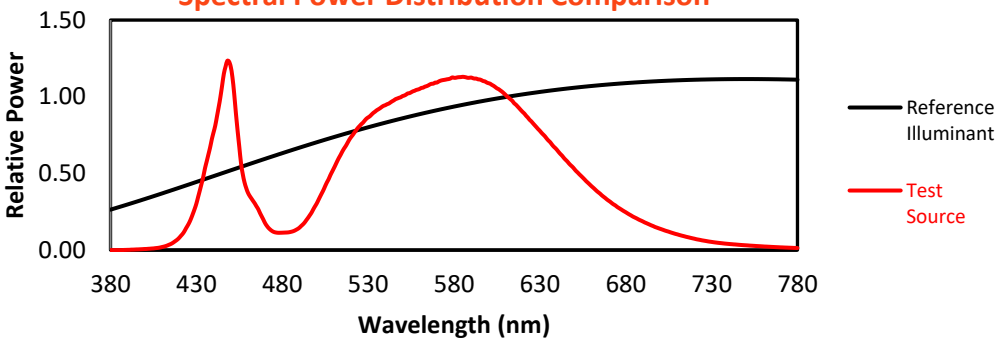
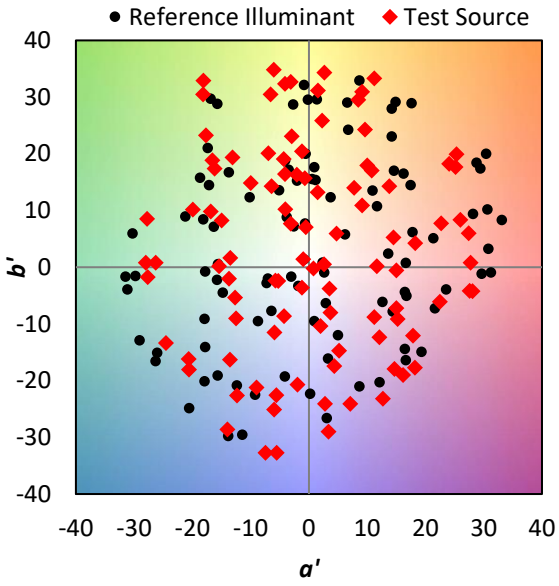
Summary

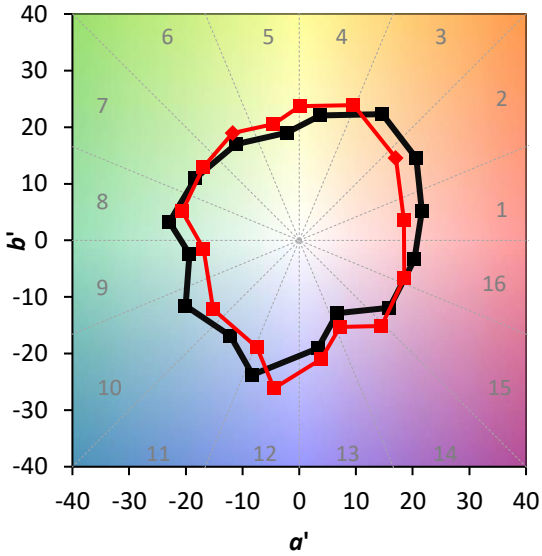
R_f = 74.7
R_g = 95.4
CIE R_a = 71.9
R_9 = -23.5

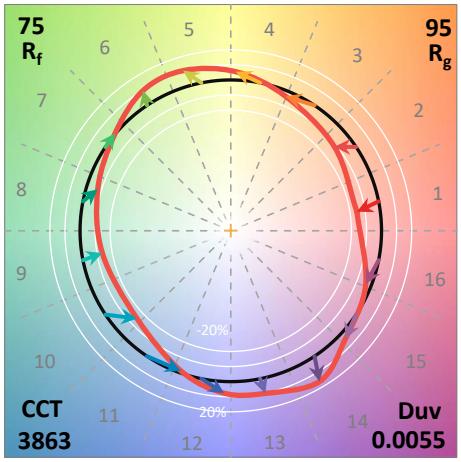
Spectral Power Distribution Comparison

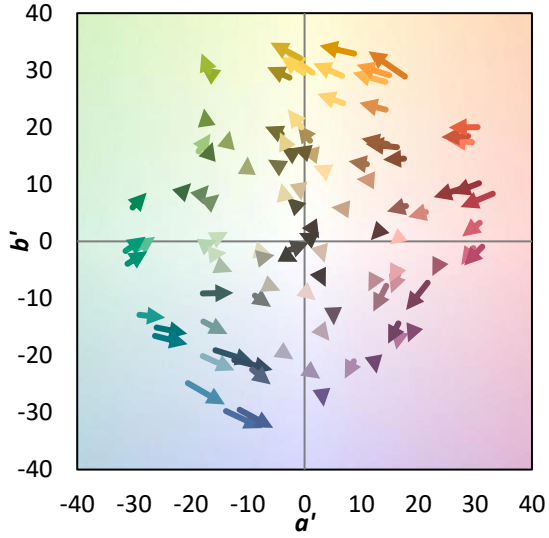


Color Vector Graphics









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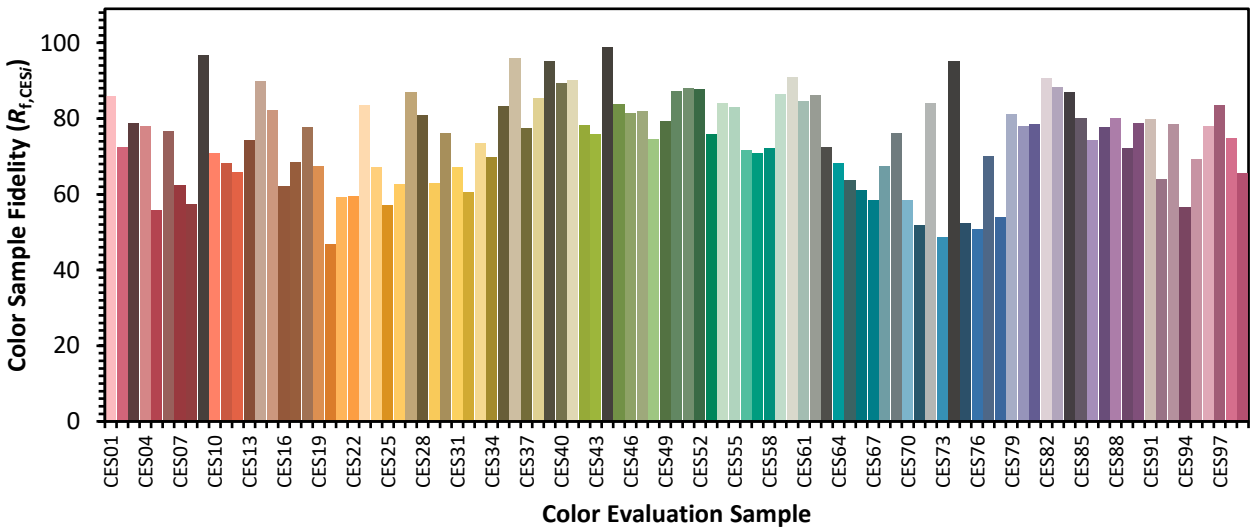
Individual Sample Fidelity Index ($R_{f,i}$)

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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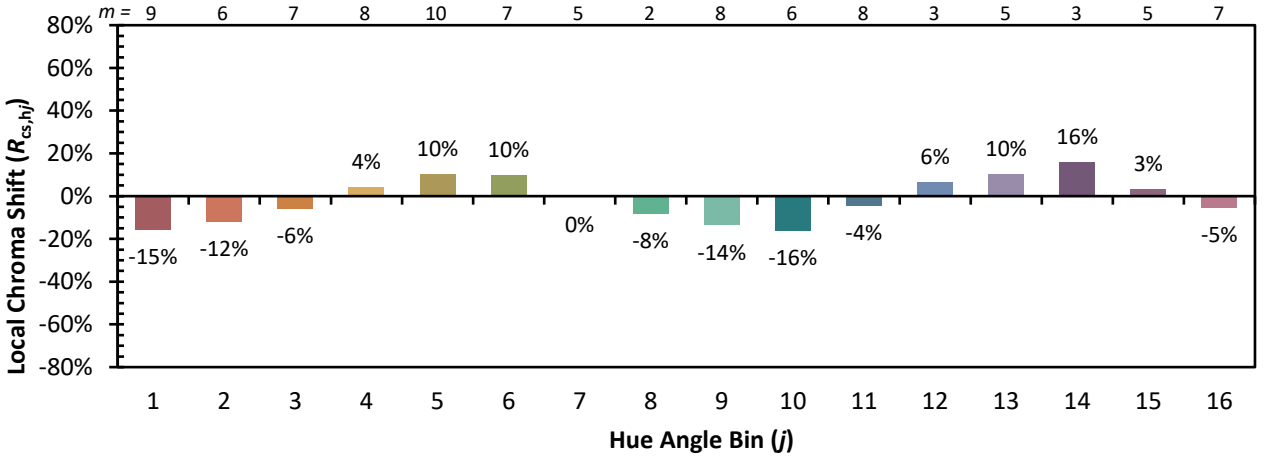
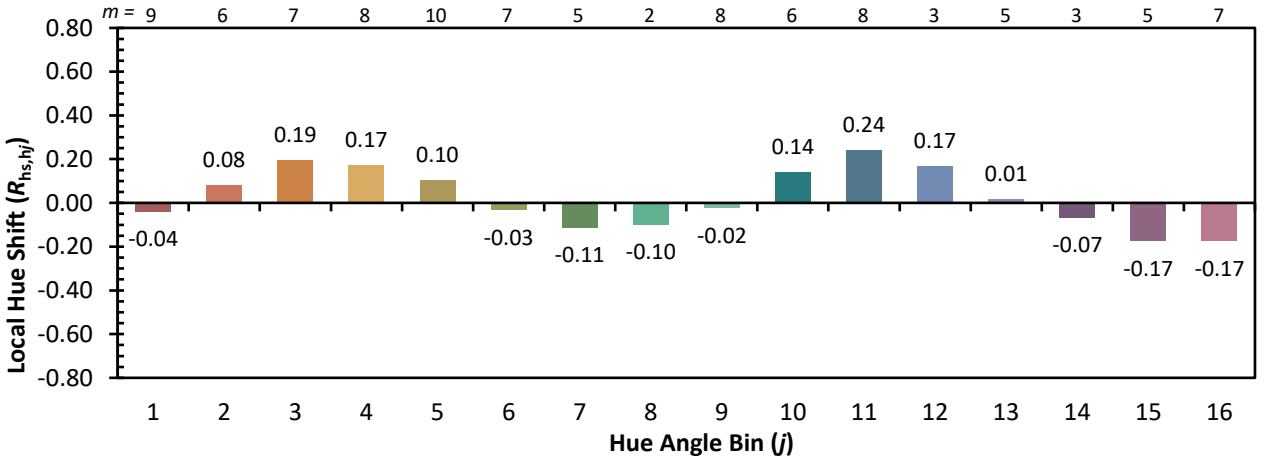
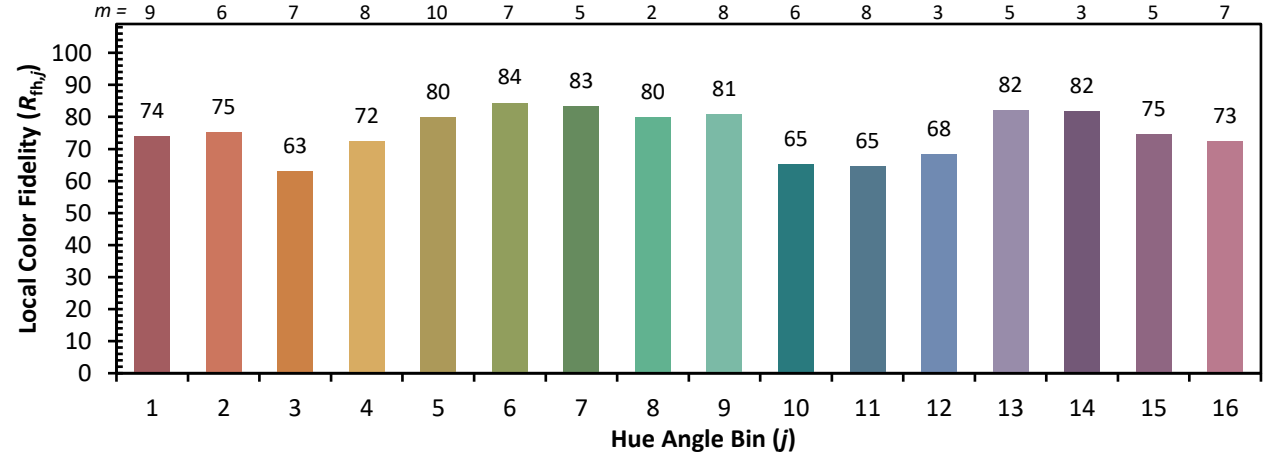
Color Rendition by Hue-Angle Bin







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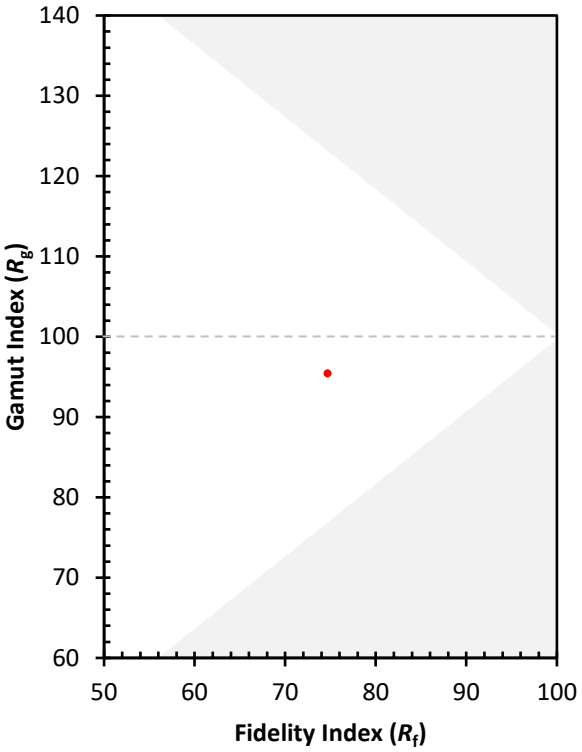
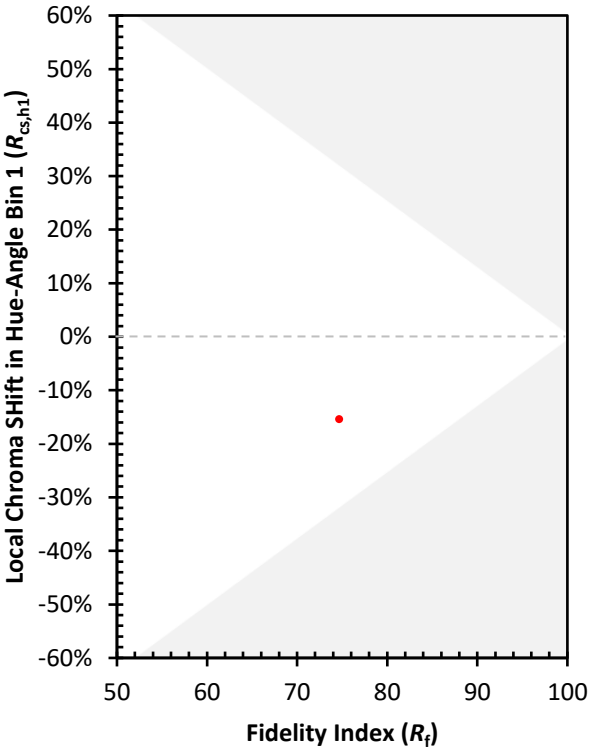
Measure Comparisons





(END OF REPORT)