

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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Peachtree City, GA 30269

Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P1445117

Luminaire Tested: TPTN-VA0-740-U-WQ-GM

Issue Date: 05/21/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445117
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: MCGRAW-EDISON
Catalog Number: TPTN-VA0-740-U-WQ-GM
Description: TOPTIER NANO SPIDER MOUNT VISUAL COMFORT LED LUMINAIRE 9W 70CRI 4000K w/ TYP
V WIDE DISTRIBUTION OPTIC
Light Source: 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 943.2 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Luminous Opening: Circular (Dia: 0.71' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 8.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.98
Total Harmonic Distortion (THDi): 29.6%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

REPORT NUMBER: P1445117

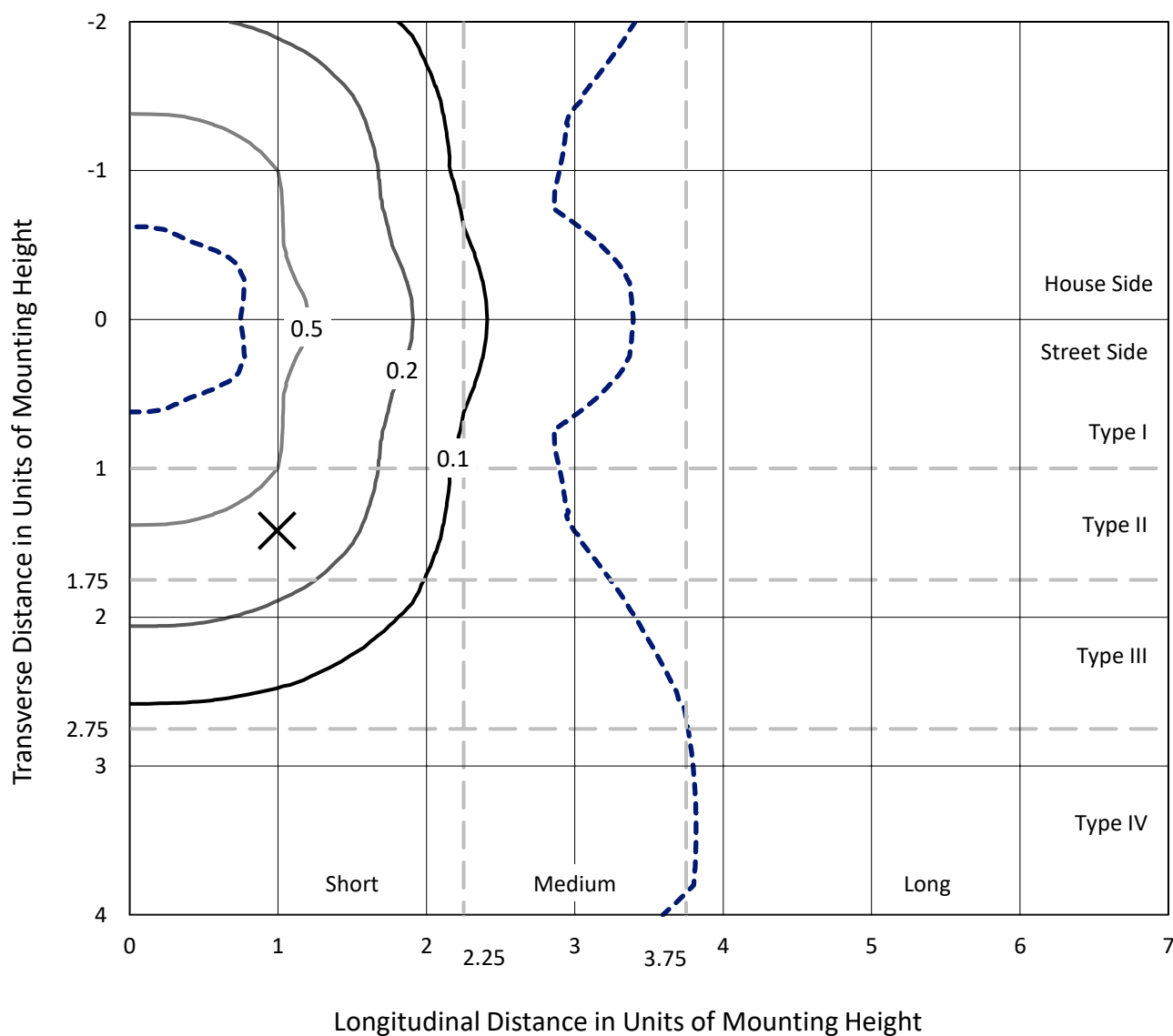
CATALOG NUMBER: TPTN-VA0-740-U-WQ-GM

Iso-Footcandle Lines of Horizontal Illumination

'E

× Max cd

--- 1/2 Max cd



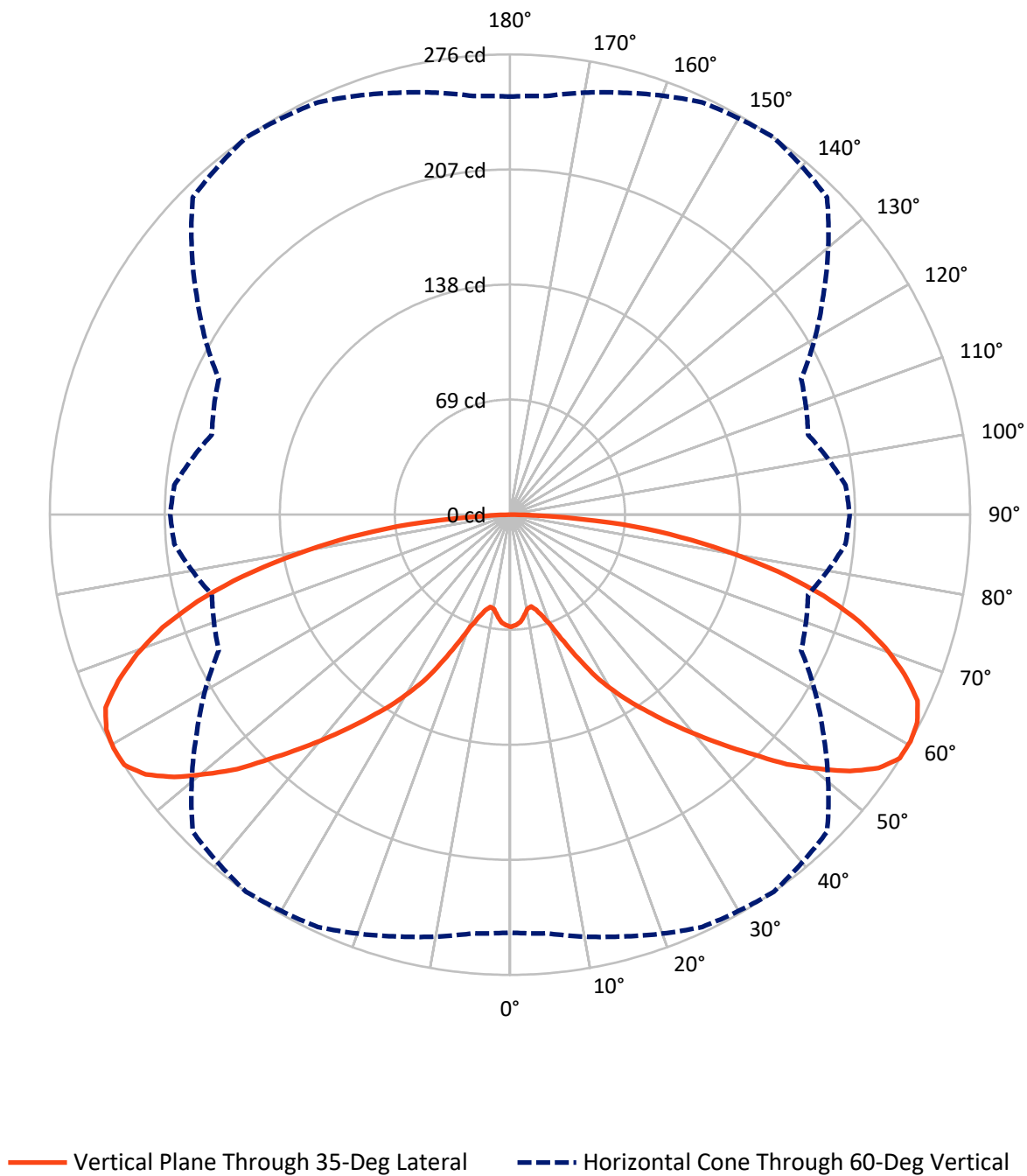
Based on 10 foot mounting height. Maximum calculated value = 0.8 fc

Type IV - Short - N/A

REPORT NUMBER: P1445117

CATALOG NUMBER: TPTN-VA0-740-U-WQ-GM

Luminous Intensity Polar Plot



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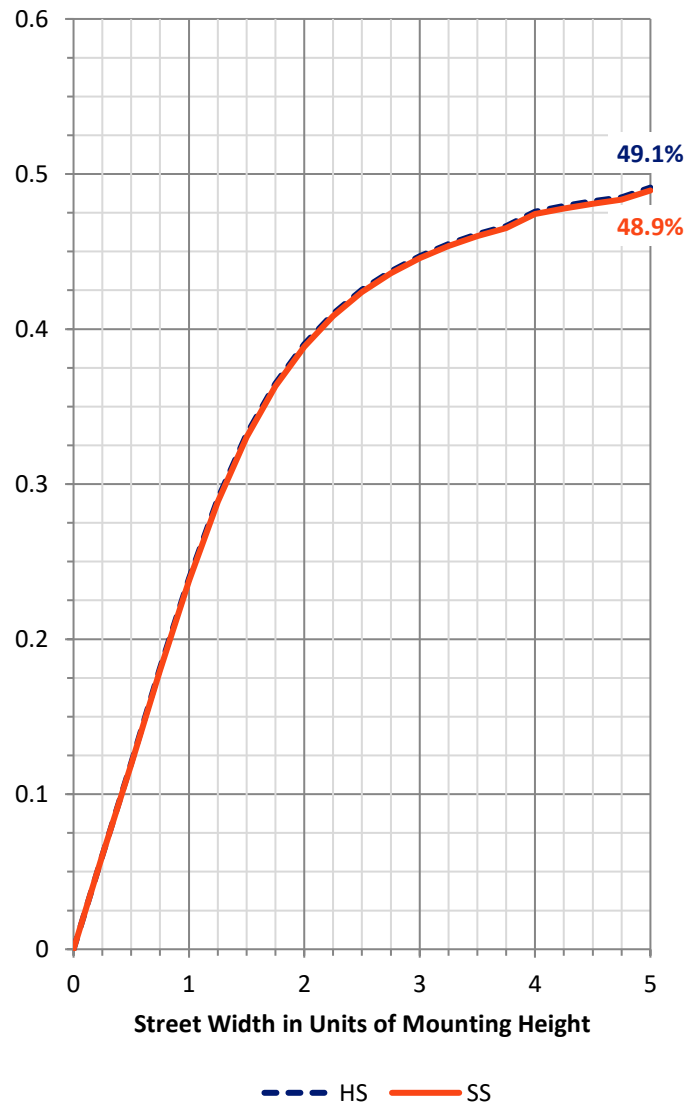
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	471.6	0.0	471.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	471.6	0.0	471.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	943.2	0.0	943.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.0	0.6
10°-20°	17.9	1.9
20°-30°	43.7	4.6
30°-40°	87.1	9.2
40°-50°	145.6	15.4
50°-60°	207.7	22.0
60°-70°	221.4	23.5
70°-80°	164.7	17.5
80°-90°	49.2	5.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	943.2	100.0
0°-180°	943.2	100.0

Coefficient of Utilization



REPORT NUMBER: P1445117

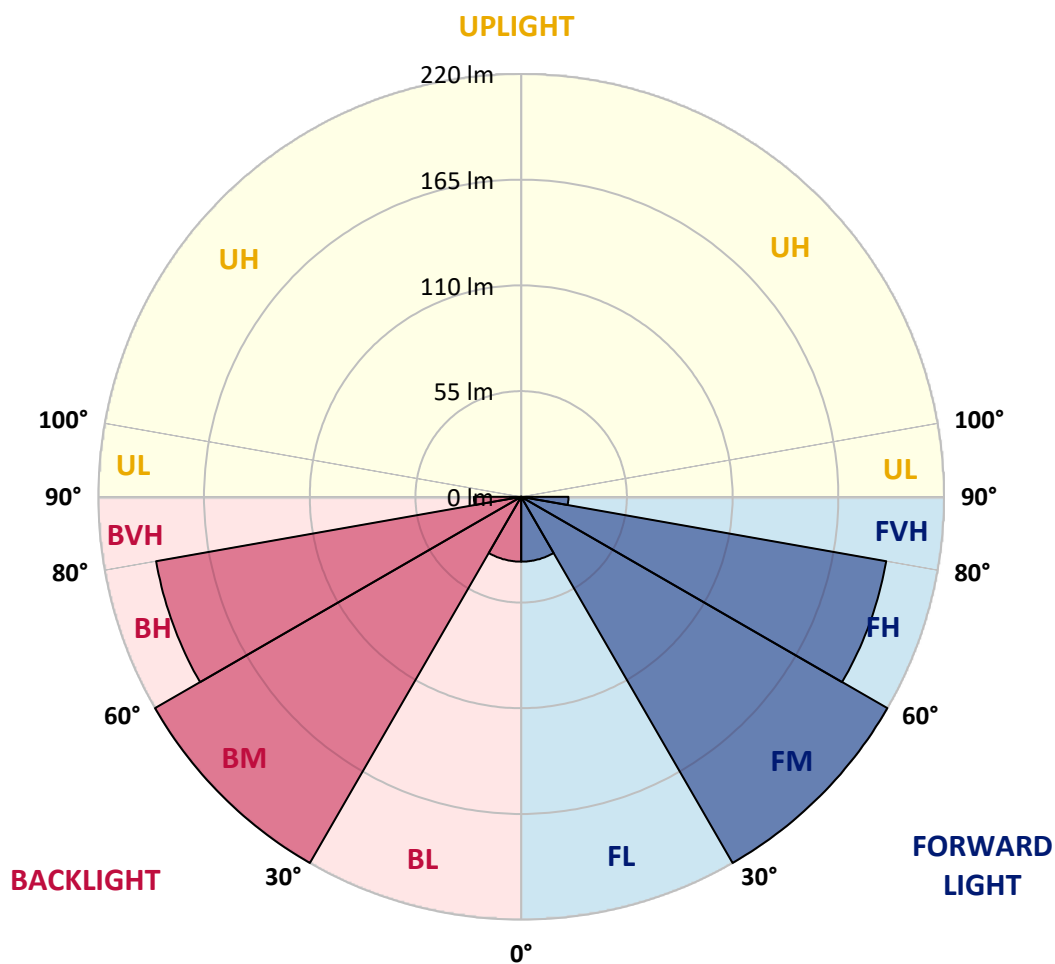
CATALOG NUMBER: TPTN-VA0-740-U-WQ-GM

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	33.8	3.6			
FM	(30°-60°)	220.2	23.3			
FH	(60°-80°)	193.0	20.5			G0/660
FVH	(80°-90°)	24.6	2.6			G1/100
BL	(0°-30°)	33.8	3.6	B0/110		
BM	(30°-60°)	220.2	23.3	B1/1000		
BH	(60°-80°)	193.0	20.5	B1/500		G1/500
BVH	(80°-90°)	24.6	2.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short



REPORT NUMBER: P1445117

CATALOG NUMBER: TPTN-VA0-740-U-WQ-GM

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2
2.5°	66.6	66.6	66.4	66.4	66.3	66.3	66.3	66.3	66.4	66.4	66.4
5°	64.6	64.4	64.6	64.6	64.7	64.7	65.2	65.7	65.8	66.0	66.0
7.5°	60.2	60.1	60.4	60.7	61.2	61.8	62.2	62.7	63.0	63.3	63.5
10°	56.8	56.8	56.8	57.1	57.4	58.2	59.4	60.4	61.2	61.6	61.8
12.5°	56.0	56.0	56.0	56.2	56.5	57.1	58.8	60.5	61.6	62.1	62.2
15°	58.1	58.1	58.2	58.7	59.3	59.6	61.0	63.0	64.4	65.5	65.5
17.5°	61.3	61.3	62.6	63.6	64.3	63.9	64.9	66.6	68.8	70.3	70.5
20°	67.7	68.1	70.3	71.6	71.4	70.2	70.2	71.7	74.5	76.7	77.3
22.5°	79.3	79.6	81.8	82.7	82.6	79.5	77.3	78.4	82.1	84.9	85.5
25°	93.6	94.4	96.1	97.9	95.6	90.6	86.5	86.1	90.2	94.1	95.0
27.5°	111.1	111.1	112.2	112.7	110.2	103.4	97.5	95.5	99.3	104.0	104.8
30°	125.9	126.2	124.8	123.4	122.3	113.8	106.6	104.1	107.9	112.8	113.5
32.5°	141.2	140.6	137.1	135.2	134.6	125.1	116.4	112.8	115.6	121.5	122.0
35°	154.8	153.8	149.0	146.8	146.5	137.2	126.0	121.1	123.6	130.1	131.2
37.5°	168.6	167.3	161.9	160.2	159.9	151.0	136.4	129.6	132.4	139.7	140.3
40°	181.4	180.8	175.7	174.5	173.8	165.3	147.1	139.4	140.9	149.6	150.4
42.5°	193.9	194.0	190.9	189.2	188.9	179.6	159.1	148.7	150.6	160.0	161.1
45°	207.2	207.2	206.3	205.4	205.0	196.7	172.1	158.9	160.2	170.6	172.0
47.5°	221.0	222.0	222.3	222.9	223.5	214.8	186.3	170.1	169.3	181.3	182.5
50°	232.8	233.6	237.9	238.6	239.3	230.8	198.7	179.1	177.7	190.3	191.1
52.5°	242.8	243.7	250.2	253.8	255.3	245.7	211.9	187.2	183.9	197.6	198.8
55°	250.8	251.8	259.7	266.4	268.1	260.9	222.3	193.7	188.3	203.0	205.2
57.5°	252.2	253.3	263.6	271.6	275.5	269.3	228.6	194.8	188.6	203.8	205.8
60°	250.5	251.8	261.7	272.6	275.8	268.8	229.3	192.6	185.0	201.9	203.6
62.5°	246.3	248.5	257.5	268.2	274.0	266.2	227.5	187.2	180.2	198.5	199.8
65°	235.6	237.3	250.7	259.7	268.5	259.5	222.9	179.4	173.5	189.2	190.0
67.5°	219.6	221.6	234.2	249.3	255.0	247.9	212.3	170.4	159.6	175.1	176.8
70°	205.0	205.5	215.6	232.8	238.6	234.8	199.8	156.9	145.0	161.7	163.8
72.5°	184.7	185.9	196.2	211.4	218.9	217.3	184.2	140.6	129.3	145.7	146.5
75°	159.1	160.8	171.8	185.6	194.3	192.8	164.1	121.7	111.9	125.1	125.7
77.5°	131.5	133.8	143.0	156.3	164.5	163.1	139.1	101.7	91.1	102.4	103.1
80°	101.7	103.5	112.4	124.6	130.2	130.5	111.8	78.7	69.5	78.5	78.4
82.5°	69.7	72.2	80.4	89.4	96.5	97.3	82.4	56.2	47.8	52.9	52.9
85°	36.2	37.7	44.7	53.7	60.5	62.4	52.0	33.2	25.5	26.4	25.0
87.5°	6.7	6.8	8.1	10.7	14.4	15.1	13.0	9.6	6.7	4.7	3.1
90°	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

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 families of products including TTN-D0-740-U-WQ

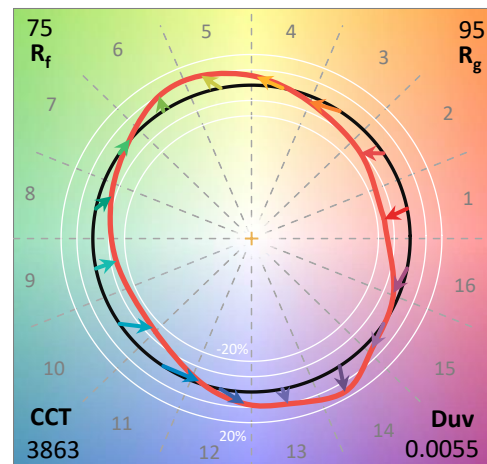
Test Information

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
 R_f: 74.7
 R_g: 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

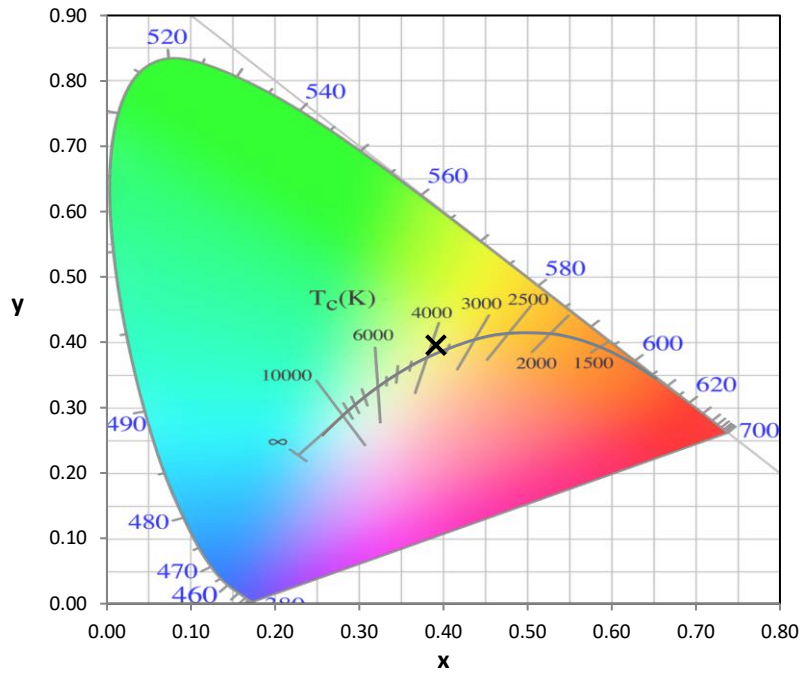
Stabilization Time: 37M
 Operation Time: 1H 37M
 Sphere Temperature (°C): 25.0

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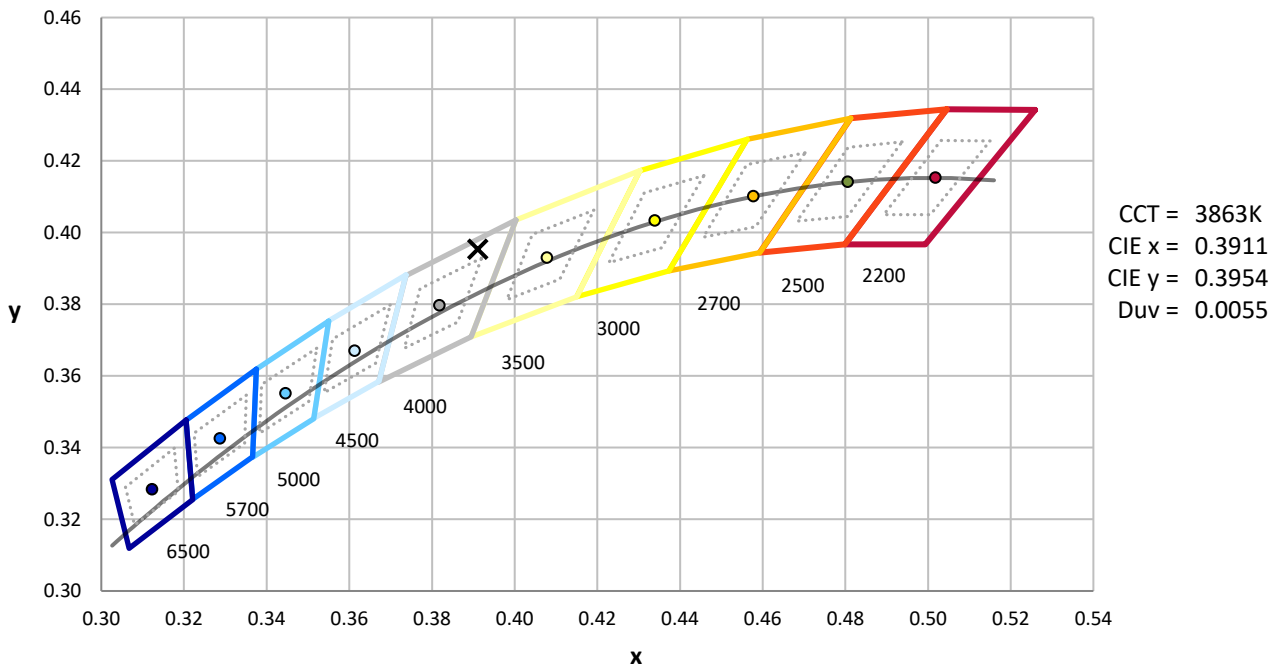
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



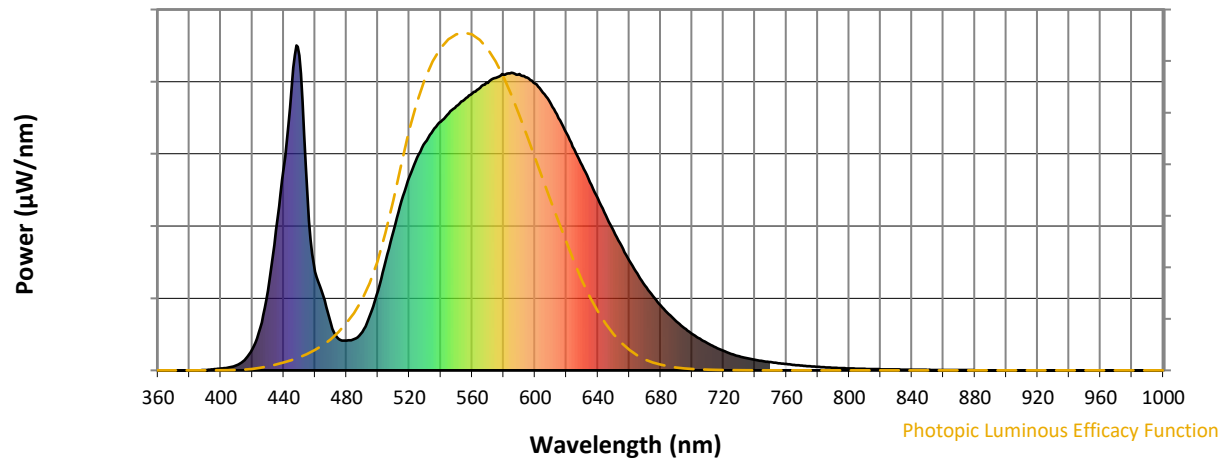
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 7-step quadrangle

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Photopic Flux vs. Wavelength

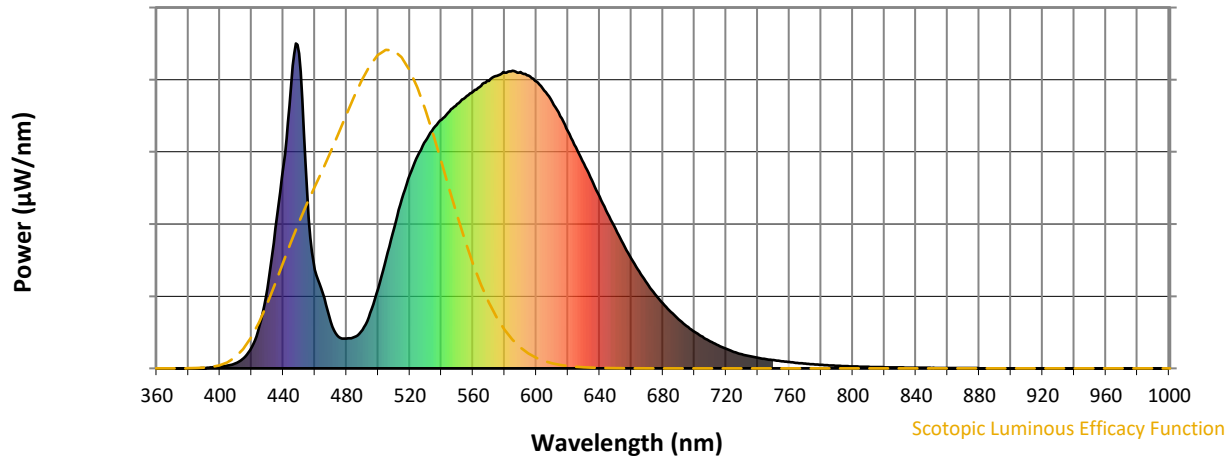


Photopic Lumens: NR

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



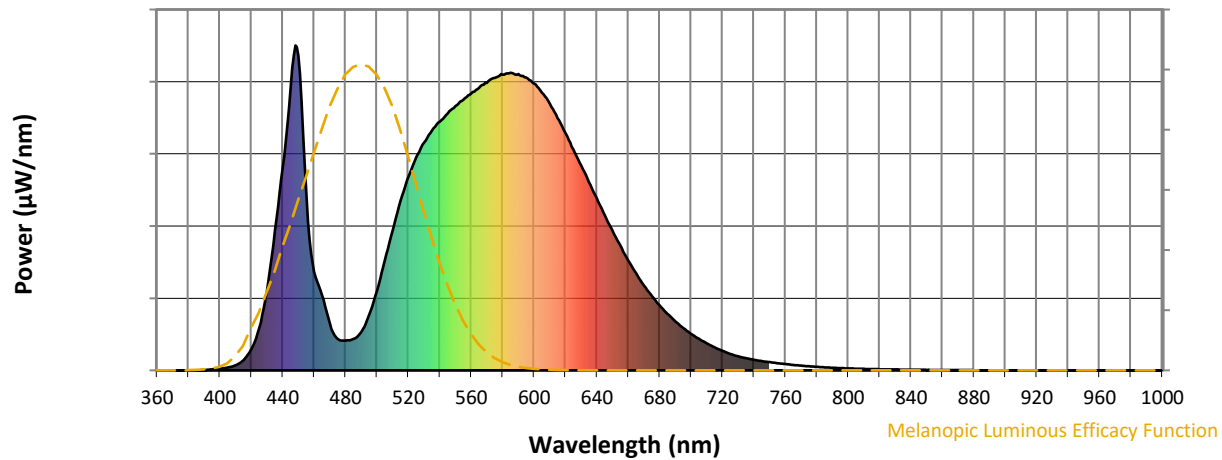
Scotopic Lumens: NR

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

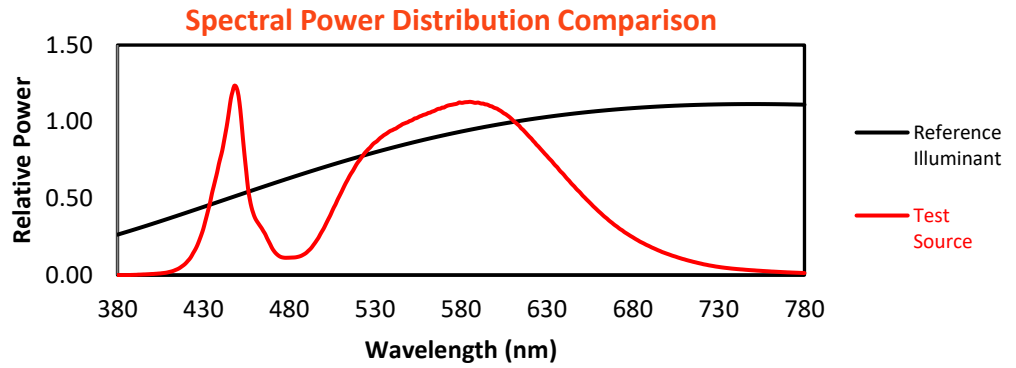
λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	118	NR	620	730	NR	750	25	NR	880	1	NR
365	0	NR	495	170	NR	625	680	NR	755	22	NR	885	0	NR
370	0	NR	500	245	NR	630	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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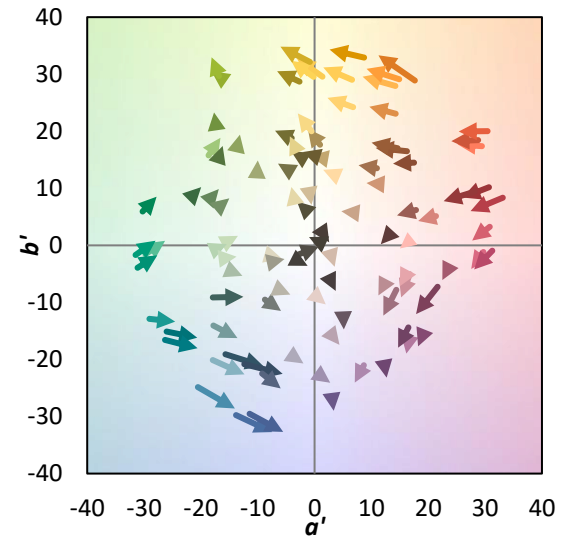
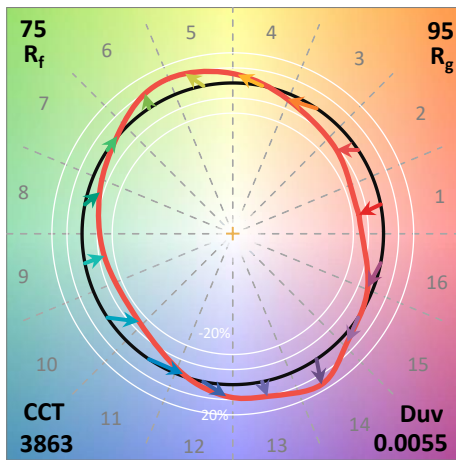
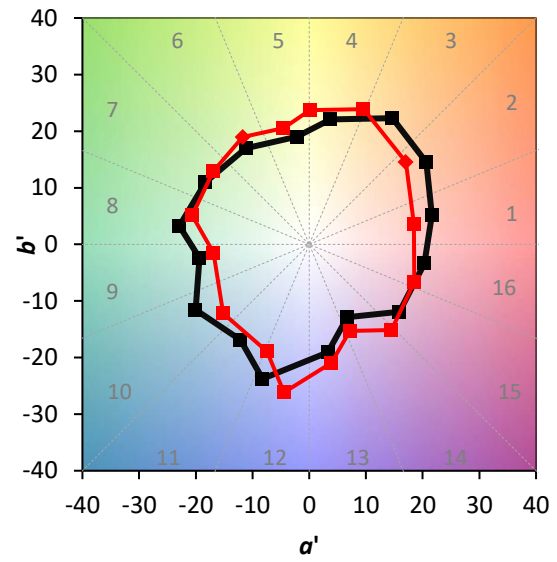
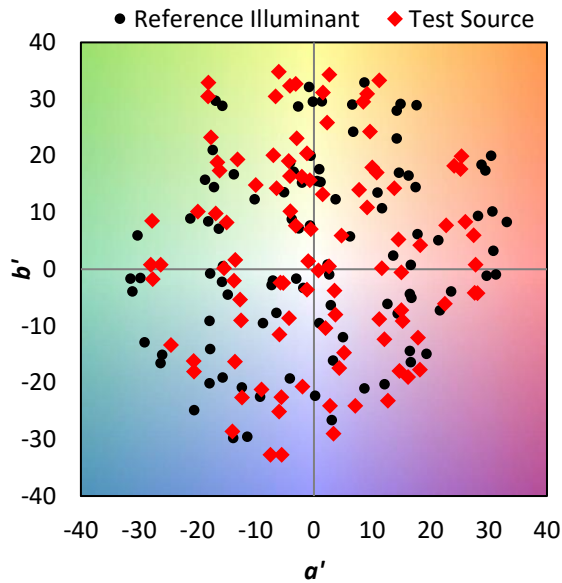
TM-30-18

Summary

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

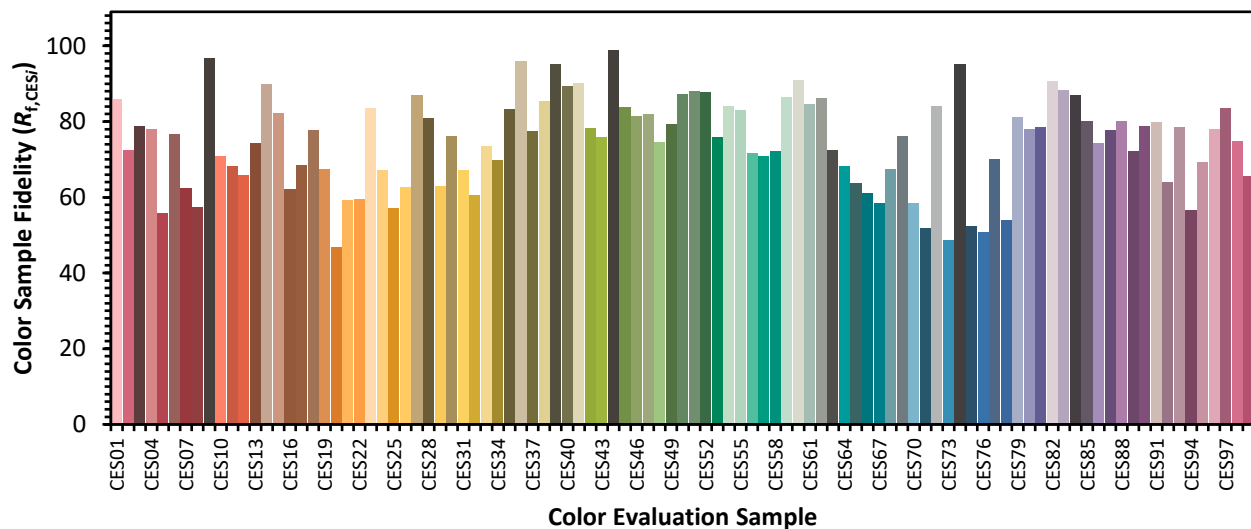


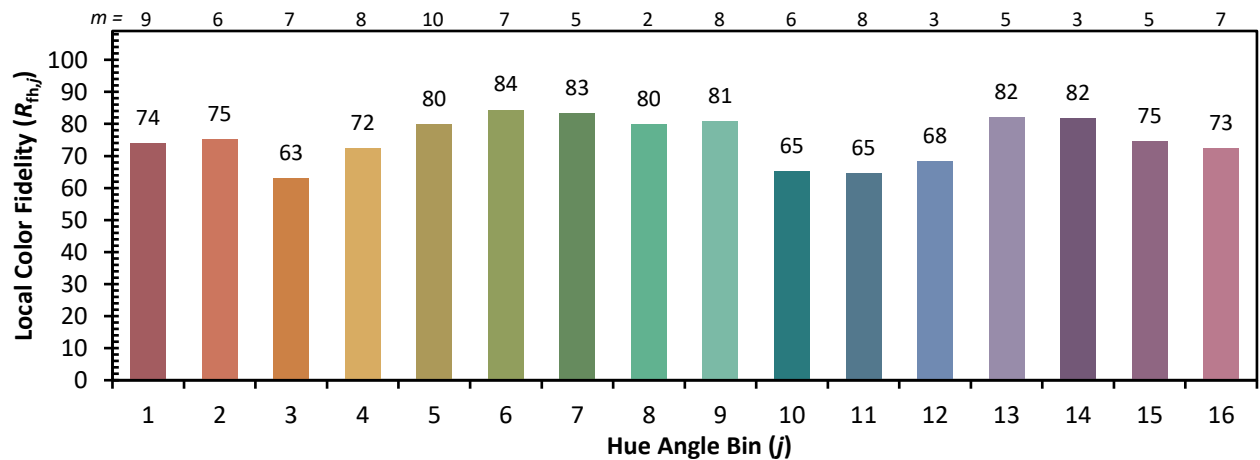
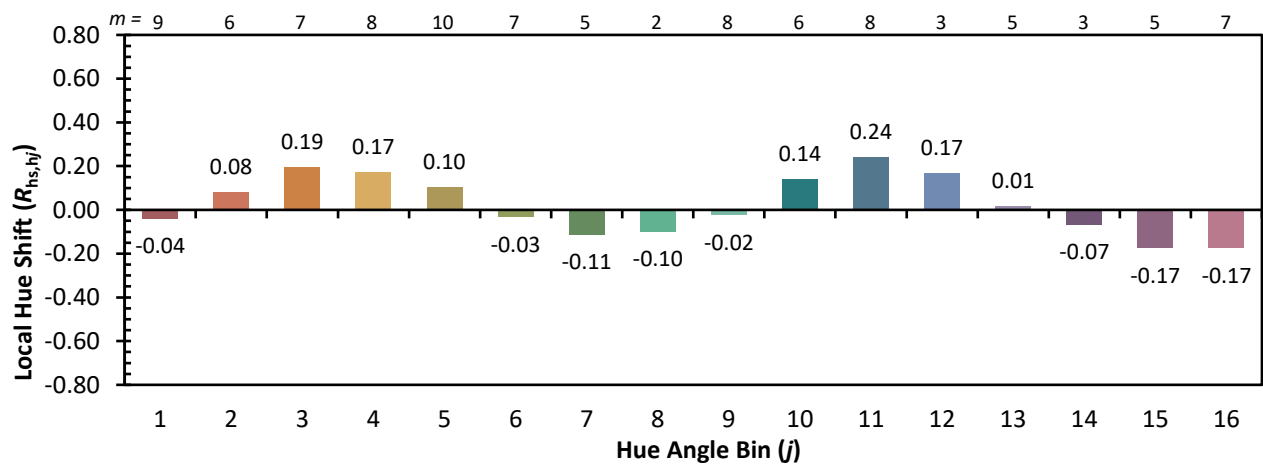
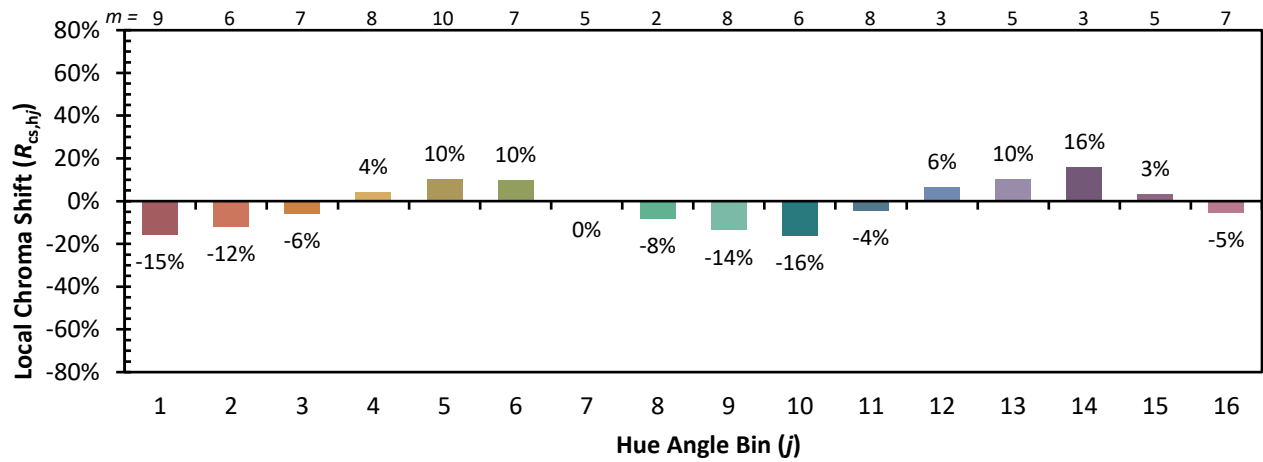
Color Vector Graphics



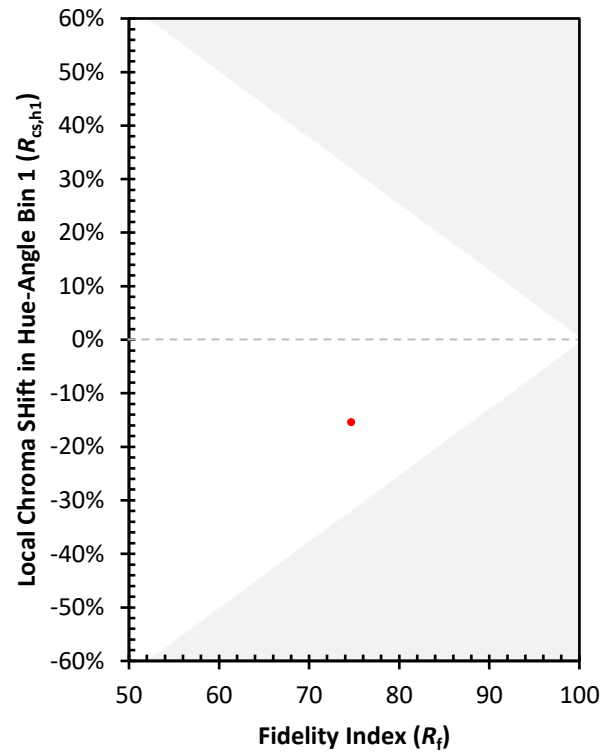
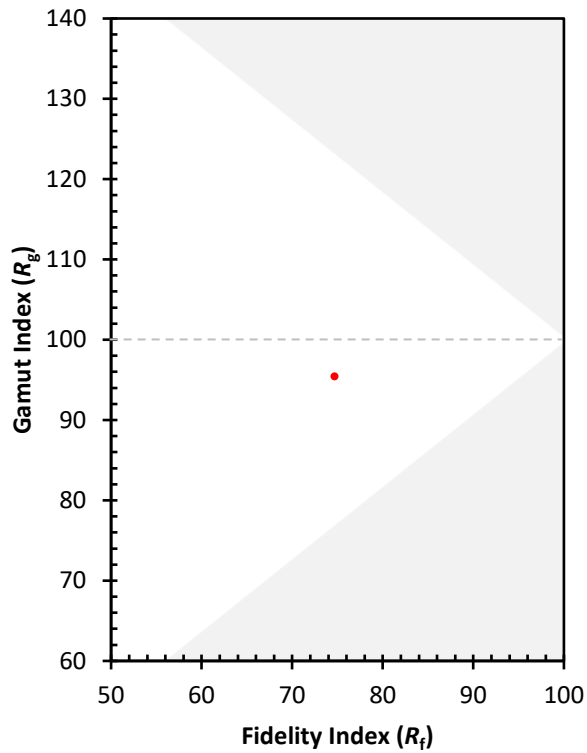
Individual Sample Fidelity Index ($R_{f,i}$)

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	



Color Rendition by Hue-Angle Bin


Measure Comparisons



(END OF REPORT)