

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: P1445246

Luminaire Tested: TPTN-VA1-740-U-DL-CG-GM

Issue Date: 05/21/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445246
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: MCGRAW-EDISON
Catalog Number: TPTN-VA1-740-U-DL-CG-GM
Description: TOPTIER NANO SPIDER MOUNT VISUAL COMFORT LED LUMINAIRE 27W 70CRI 4000K w/
DRIVE LANE TYPE IV DISTRIBUTION OPTIC AND GLASS
Light Source: 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2295.7 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Luminous Opening: Circular (Dia: 0.71' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 26.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.98
Total Harmonic Distortion (THDi): 11.9%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

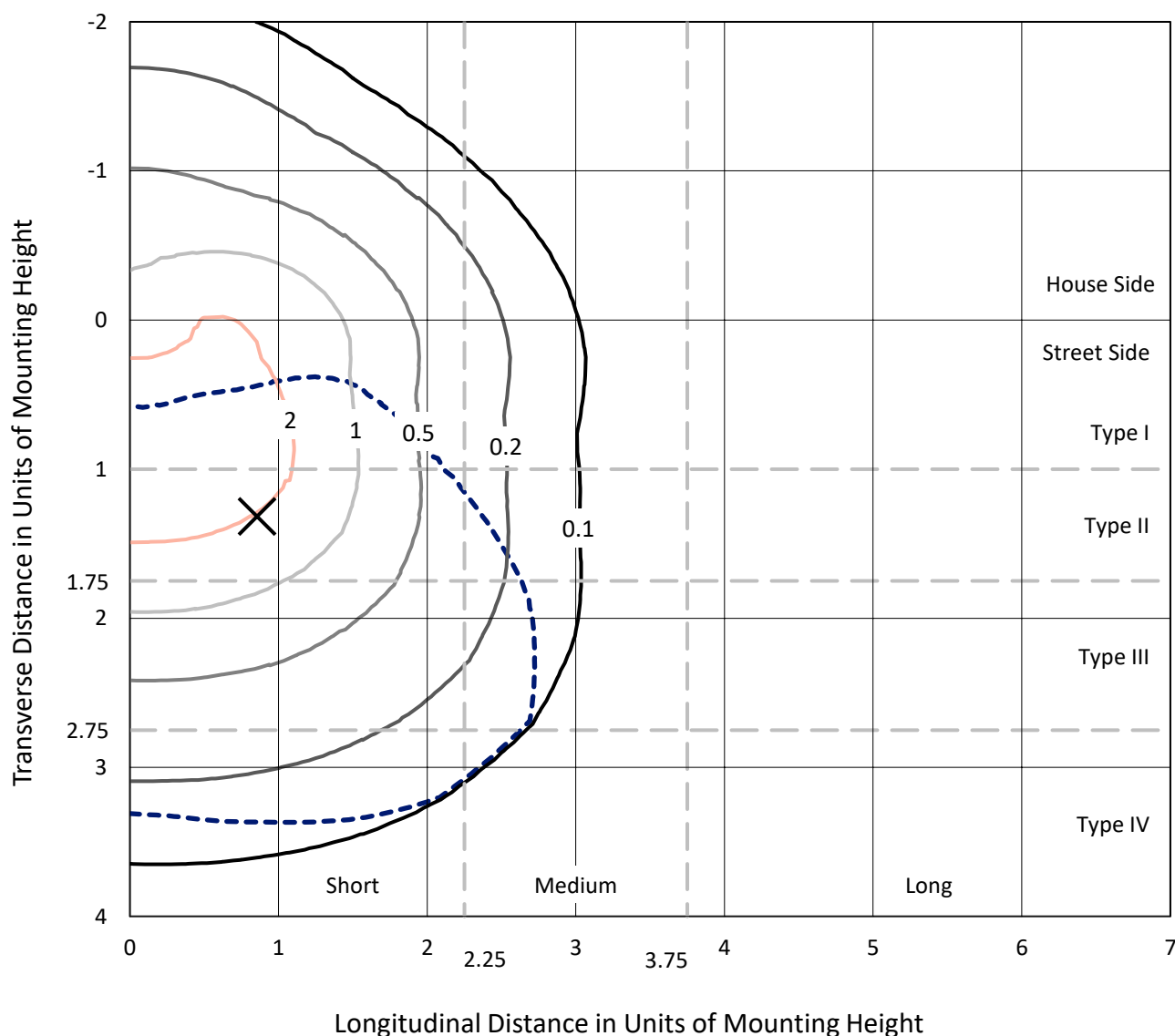
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CATALOG NUMBER: TPTN-VA1-740-U-DL-CG-GM

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



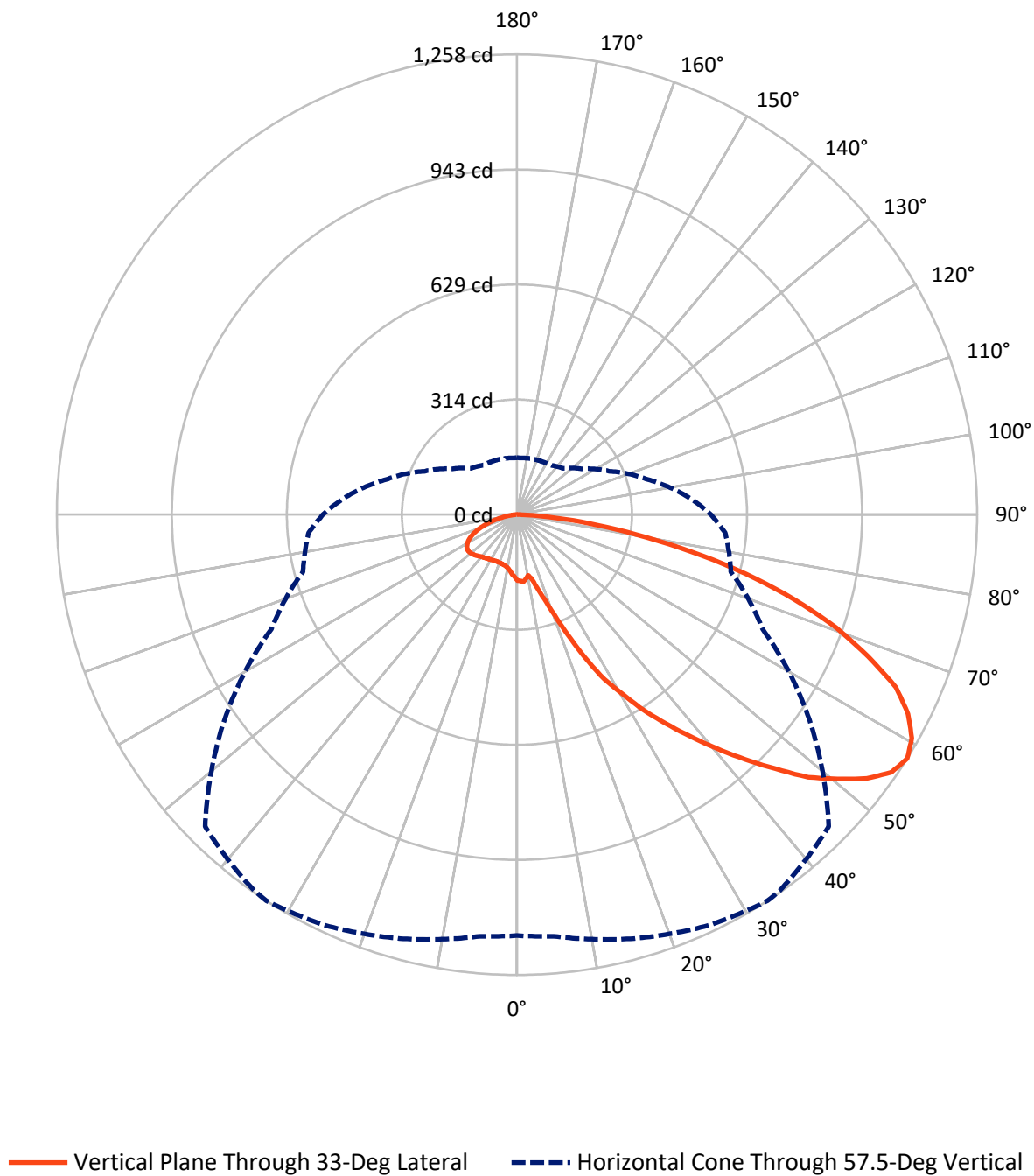
Based on 10 foot mounting height. Maximum calculated value = 4.1 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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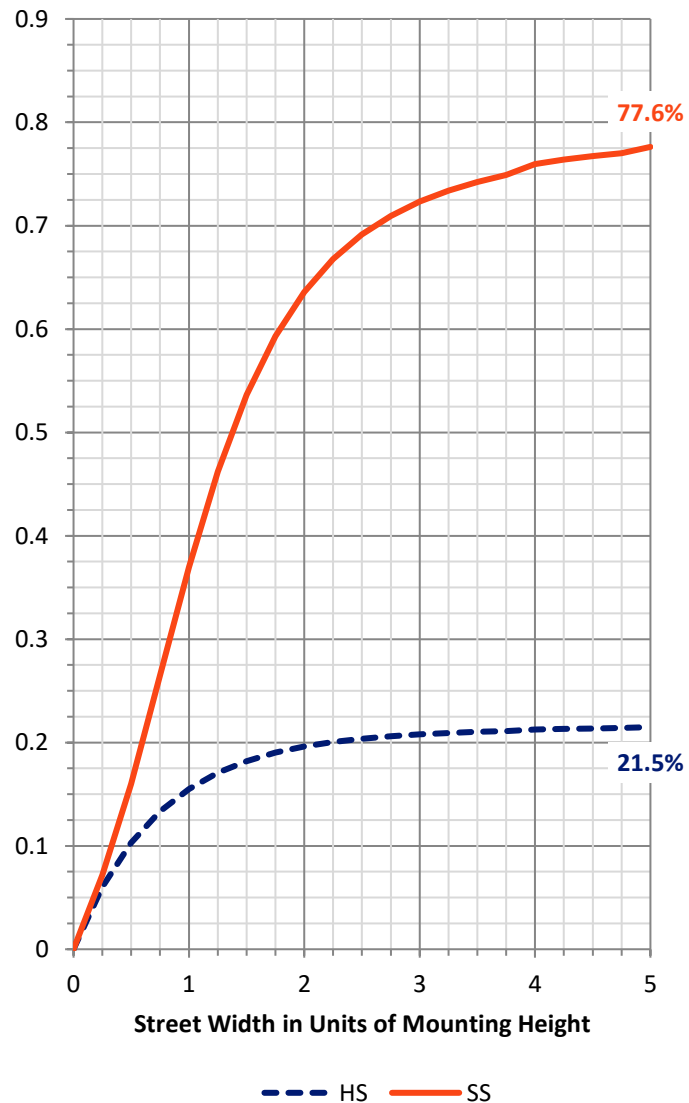
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	497.1	0.0	497.1
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	1798.6	0.0	1798.6
	% Fixture	78.3	0.0	78.3
Total	Lumens	2295.7	0.0	2295.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.3	0.7
10°-20°	51.8	2.3
20°-30°	127.9	5.6
30°-40°	248.3	10.8
40°-50°	403.6	17.6
50°-60°	545.7	23.8
60°-70°	531.3	23.1
70°-80°	313.1	13.6
80°-90°	57.6	2.5
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°	2295.7	100.0
0°-180°	2295.7	100.0

Coefficient of Utilization



REPORT NUMBER: P1445246

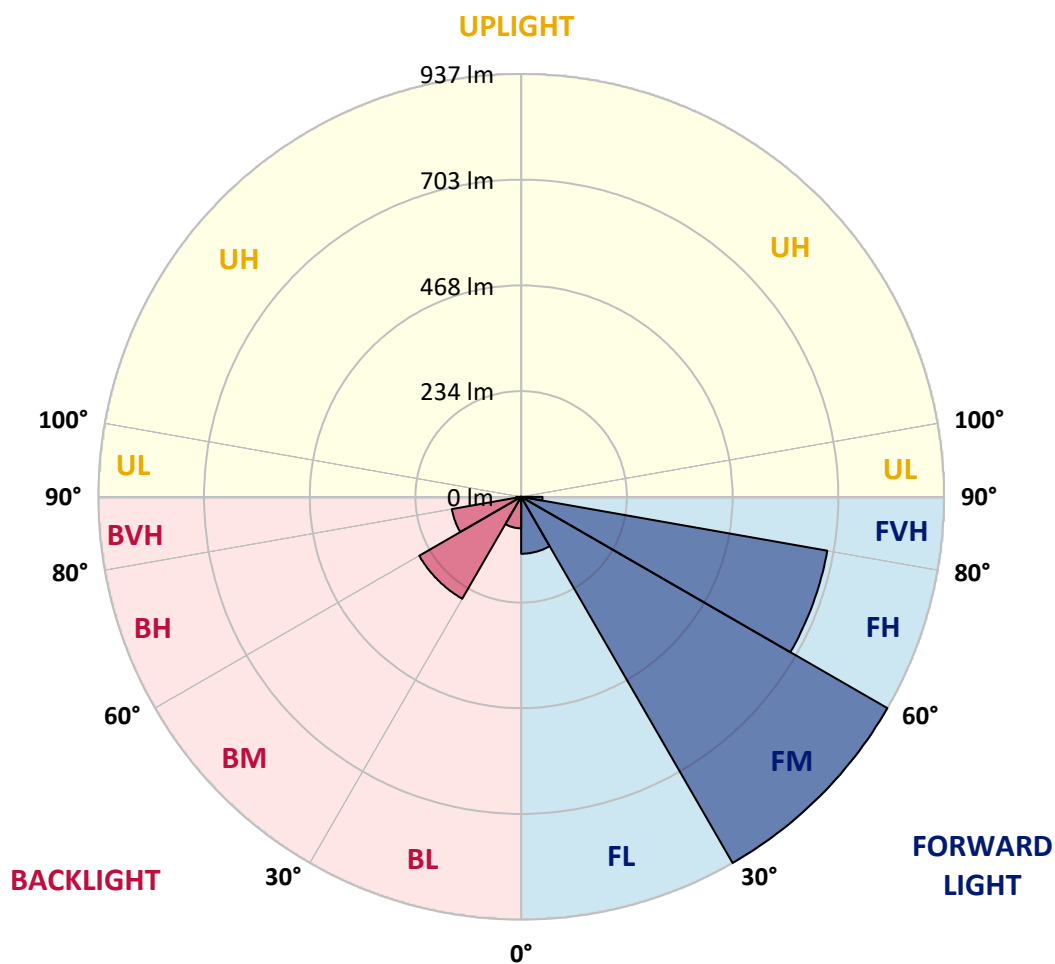
CATALOG NUMBER: TPTN-VA1-740-U-DL-CG-GM

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	126.2	5.5			
FM	(30°-60°)	936.8	40.8			
FH	(60°-80°)	688.5	30.0			G1/1800
FVH	(80°-90°)	47.1	2.1			G1/100
BL	(0°-30°)	69.8	3.0	B0/110		
BM	(30°-60°)	260.8	11.4	B1/1000		
BH	(60°-80°)	155.9	6.8	B1/500		G1/500
BVH	(80°-90°)	10.5	0.5			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: P1445246

CATALOG NUMBER: TPTN-VA1-740-U-DL-CG-GM

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	180.3	180.3	180.3	180.3	180.3	180.3	180.3	180.3	180.3	180.3	180.3
2.5°	182.6	182.1	182.1	181.7	181.2	181.2	180.8	180.3	179.4	178.5	177.6
5°	191.3	190.3	188.5	186.7	184.9	184.9	184.0	183.5	182.6	182.1	181.2
7.5°	182.6	182.6	181.7	179.4	176.7	176.2	172.1	170.7	172.1	171.6	172.1
10°	186.7	186.2	181.2	175.3	168.4	167.1	163.4	162.0	164.8	167.5	169.8
12.5°	200.8	200.8	195.4	187.6	180.3	178.5	170.7	168.0	168.4	171.6	174.4
15°	224.1	224.1	220.0	213.6	206.8	203.1	191.3	183.5	181.2	182.6	185.3
17.5°	259.7	257.9	260.2	251.1	241.9	238.7	220.0	205.9	199.9	200.4	201.3
20°	314.5	313.6	313.6	307.7	291.7	285.3	260.2	235.1	224.6	223.2	222.3
22.5°	384.3	382.1	383.0	375.7	356.0	350.6	311.8	276.6	255.2	248.8	248.3
25°	464.7	465.1	466.0	456.0	432.7	427.7	376.1	325.0	291.2	278.9	275.7
27.5°	545.9	545.9	540.5	525.8	509.0	500.3	444.1	378.4	331.4	313.1	304.5
30°	619.0	618.5	606.6	585.2	567.8	561.9	499.8	428.6	369.7	342.3	331.4
32.5°	689.7	688.3	667.3	648.6	636.3	627.2	560.1	477.0	406.7	370.2	356.5
35°	761.8	753.6	729.4	713.9	700.7	690.2	623.5	526.3	443.2	399.9	382.5
37.5°	825.3	823.0	794.7	782.8	767.8	762.3	691.5	577.0	482.0	429.5	410.8
40°	887.4	886.5	864.1	852.2	839.0	831.2	763.7	632.2	524.5	461.9	440.9
42.5°	943.1	944.9	933.0	925.3	913.8	907.9	837.2	690.2	565.6	492.5	470.2
45°	1005.6	1006.0	1003.8	1000.6	990.1	990.5	916.1	751.8	611.7	525.8	500.7
47.5°	1063.1	1066.8	1072.2	1072.7	1071.8	1067.2	1000.1	810.7	655.0	556.0	529.5
50°	1104.2	1110.1	1130.2	1136.6	1134.8	1133.4	1067.2	870.5	689.7	582.4	549.6
52.5°	1143.4	1148.0	1177.2	1197.8	1197.3	1194.1	1130.7	922.5	723.5	601.2	568.3
55°	1162.6	1165.3	1203.2	1236.1	1242.0	1242.5	1188.2	960.4	742.7	613.0	577.9
57.5°	1149.8	1156.2	1199.6	1238.4	1257.6	1253.4	1205.1	975.5	740.8	605.3	571.5
60°	1120.2	1129.3	1170.8	1215.1	1239.8	1233.8	1188.6	969.5	724.4	585.6	557.3
62.5°	1075.0	1086.4	1127.0	1169.9	1199.1	1201.0	1158.5	951.7	693.8	561.4	535.0
65°	988.2	1003.3	1063.6	1110.6	1138.4	1145.3	1099.2	909.3	654.1	524.9	493.4
67.5°	893.3	903.3	951.7	1020.7	1035.3	1044.8	1017.9	839.0	602.5	467.4	442.8
70°	785.1	800.6	839.0	906.5	925.7	932.6	916.6	752.3	528.6	404.0	390.3
72.5°	664.2	670.5	713.9	764.6	793.8	802.5	785.6	652.3	447.3	336.9	326.4
75°	520.8	530.9	564.2	614.4	646.4	644.1	641.3	534.1	354.2	268.4	257.9
77.5°	386.6	392.1	424.5	461.0	487.0	489.3	488.4	407.2	265.7	195.4	188.1
80°	252.4	259.3	283.0	311.8	329.1	336.9	334.1	283.9	182.1	131.5	126.0
82.5°	142.9	144.7	162.5	178.0	199.5	198.1	203.6	173.0	110.9	77.1	70.3
85°	50.7	53.9	63.0	79.4	88.1	94.0	94.9	81.3	49.8	34.7	26.0
87.5°	5.0	5.0	8.7	12.8	16.4	17.3	17.8	18.3	14.6	11.4	3.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1445246

CATALOG NUMBER: TPTN-VA1-740-U-DL-CG-GM

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	180.3	180.3	180.3	180.3	180.3	180.3	180.3	180.3	180.3	180.3	180.3
2.5°	177.6	176.7	174.8	173.0	172.5	170.7	170.3	169.8	168.9	168.9	168.4
5°	179.4	178.5	175.7	172.5	169.3	166.6	164.3	162.0	160.2	158.8	158.8
7.5°	173.0	173.5	173.5	171.2	166.6	161.6	155.7	151.1	147.0	145.2	144.2
10°	170.3	171.6	171.2	168.9	164.3	157.5	149.7	142.4	136.5	132.8	132.4
12.5°	175.3	175.3	173.9	170.3	163.9	155.2	146.1	136.5	129.6	125.5	125.1
15°	186.2	185.8	180.8	173.9	164.8	154.7	144.2	133.7	125.1	120.5	120.0
17.5°	201.8	199.5	191.3	179.4	167.1	154.7	142.9	131.5	122.3	116.9	115.9
20°	220.9	216.4	203.6	186.2	169.8	155.7	142.0	129.6	120.5	114.6	114.1
22.5°	244.7	237.4	217.3	194.0	174.4	157.5	142.0	128.7	120.0	115.5	115.5
25°	268.4	258.4	232.8	202.7	178.9	158.8	142.0	129.6	122.3	119.1	118.7
27.5°	294.4	280.3	247.9	212.7	183.5	160.7	142.9	130.1	124.6	122.3	122.3
30°	318.2	302.2	263.4	222.3	188.5	163.0	144.7	131.5	126.0	125.1	124.2
32.5°	340.5	321.8	278.0	231.4	194.5	165.2	146.1	132.8	127.8	126.9	126.4
35°	365.2	344.6	291.2	240.1	199.0	168.9	147.9	135.1	130.1	129.2	129.2
37.5°	391.6	366.1	306.7	249.2	203.6	172.5	149.7	138.3	133.3	132.4	131.9
40°	417.2	388.9	322.3	258.4	209.1	175.3	152.0	141.0	136.9	136.0	135.6
42.5°	444.6	412.2	337.3	266.6	214.5	178.0	155.2	145.2	141.5	139.7	139.2
45°	469.7	434.6	351.0	275.2	219.6	181.2	158.8	150.2	146.5	144.7	144.2
47.5°	493.9	453.7	363.8	281.6	223.7	183.5	162.5	154.3	151.5	149.7	148.8
50°	513.5	469.2	372.9	285.7	226.4	184.9	165.2	157.9	155.7	152.9	152.5
52.5°	527.7	481.6	379.3	288.9	226.9	184.9	167.1	162.0	159.3	156.6	155.7
55°	534.5	486.1	378.9	287.6	224.1	183.5	167.1	163.0	160.7	157.5	157.0
57.5°	530.0	479.7	370.2	279.8	217.7	178.5	164.3	160.2	157.9	155.2	155.2
60°	515.8	466.5	356.5	267.9	207.7	170.3	158.4	155.2	152.9	150.6	150.6
62.5°	493.4	447.3	339.2	250.1	195.4	160.7	150.6	147.9	146.5	144.2	143.8
65°	454.6	409.9	314.5	231.4	178.9	148.4	139.7	138.8	136.9	133.7	133.3
67.5°	409.9	368.8	278.4	208.1	159.8	132.8	126.4	125.5	123.7	121.0	121.4
70°	359.7	323.2	241.0	179.4	136.5	115.9	110.5	109.1	107.7	107.3	106.8
72.5°	303.1	272.1	201.8	146.5	114.1	97.7	93.1	92.2	91.3	90.8	90.4
75°	235.5	214.5	161.1	115.5	90.4	78.5	74.4	73.9	73.9	73.0	72.1
77.5°	173.5	156.1	117.3	84.0	65.3	57.1	55.7	55.7	56.1	55.7	54.3
80°	115.0	104.1	76.7	55.7	43.4	37.9	37.9	38.3	38.8	38.3	38.8
82.5°	61.2	57.5	43.4	32.4	25.6	22.4	22.8	23.3	24.2	23.3	24.2
85°	22.4	22.8	19.2	14.6	12.3	11.4	11.9	12.3	12.8	12.3	12.3
87.5°	1.4	4.6	7.8	6.8	5.9	5.9	5.9	5.9	5.9	5.5	5.0
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

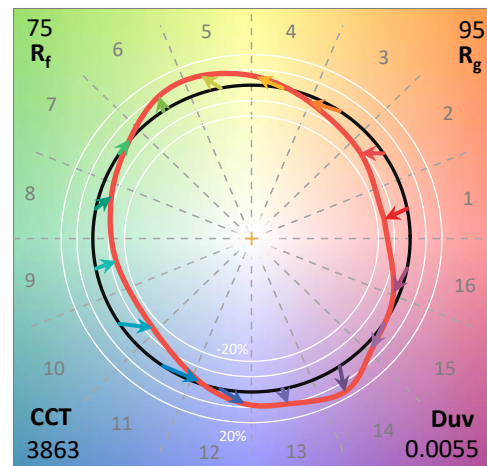
Test Information

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
 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

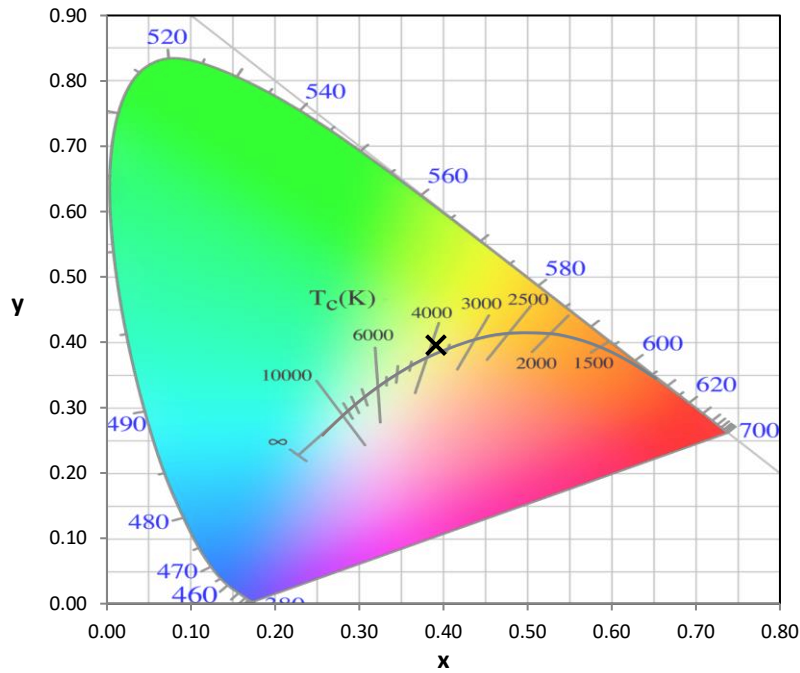
Stabilization Time: 37M
 Operation Time: 1H 37M
 Sphere Temperature (°C): 25.0

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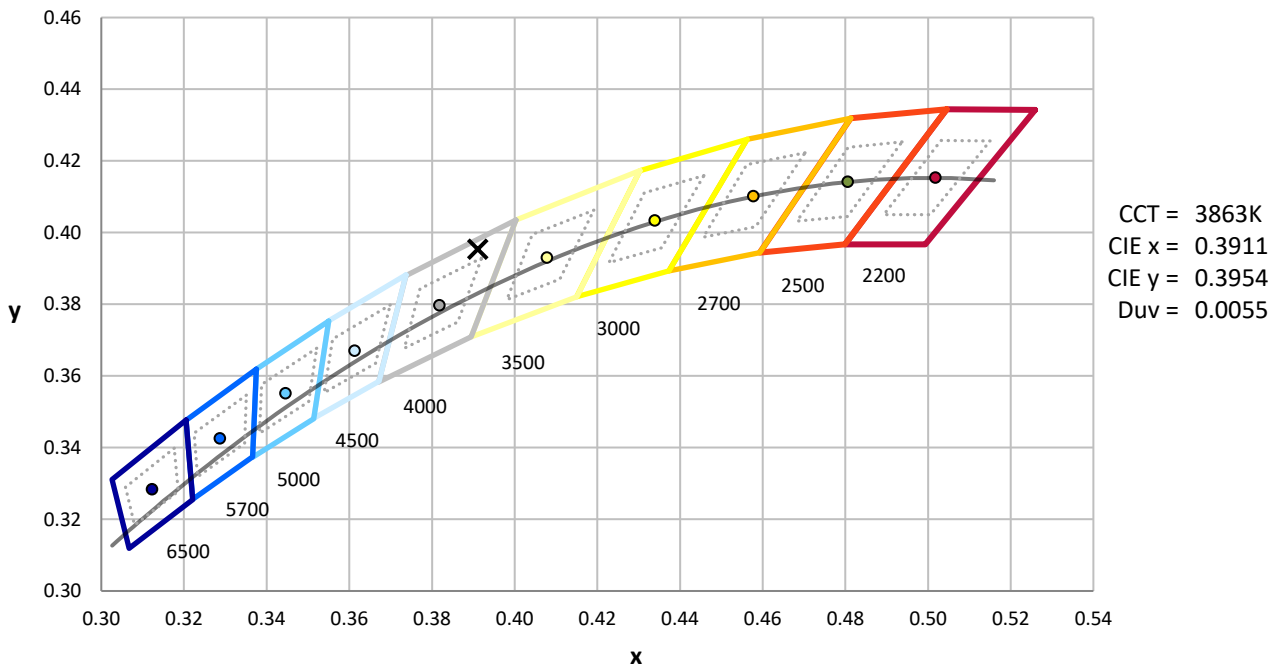
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



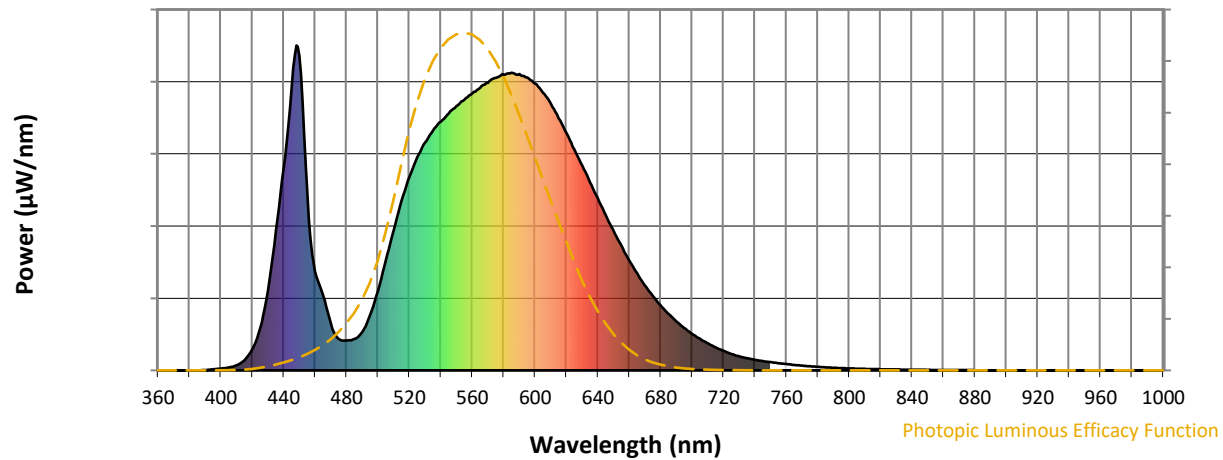
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 7-step quadrangle

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Photopic Flux vs. Wavelength

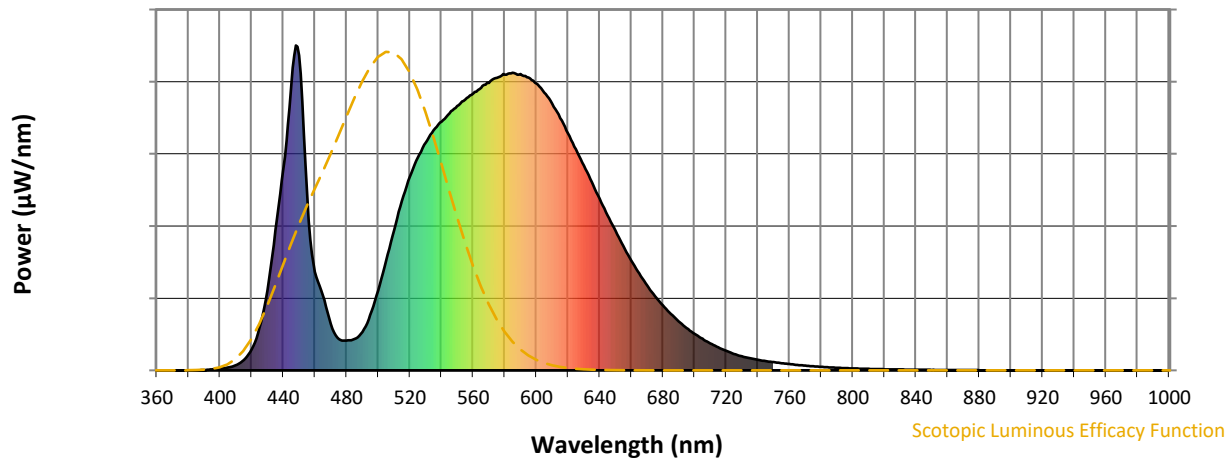


Photopic Lumens: NR

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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			

REPORT NUMBER: SP1-2411-284-2

Scotopic Flux vs. Wavelength



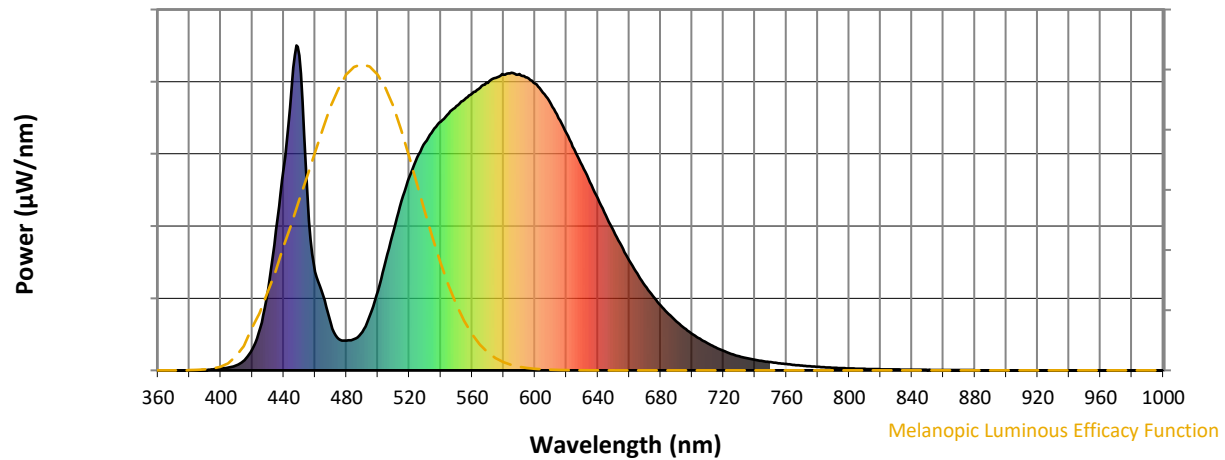
Scotopic Lumens: NR

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

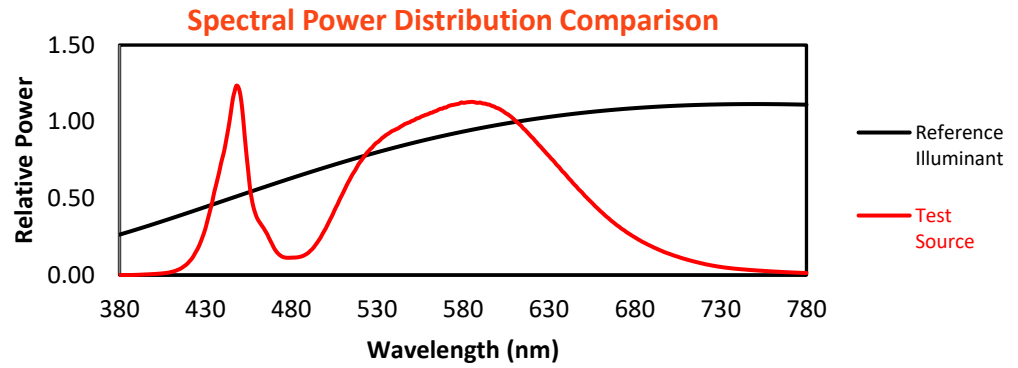
λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	118	NR	620	730	NR	750	25	NR	880	1	NR
365	0	NR	495	170	NR	625	680	NR	755	22	NR	885	0	NR
370	0	NR	500	245	NR	630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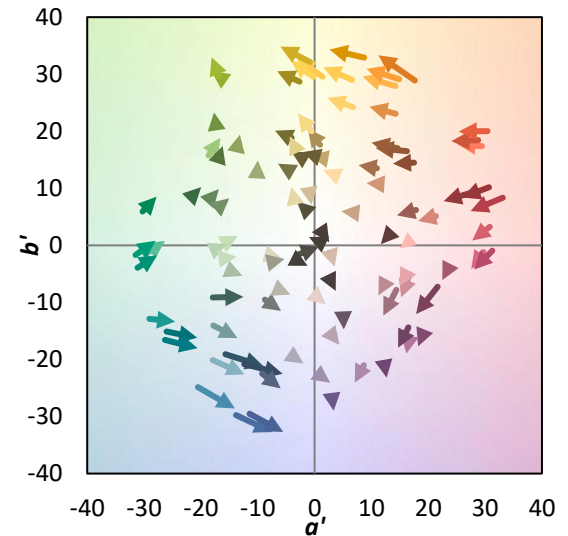
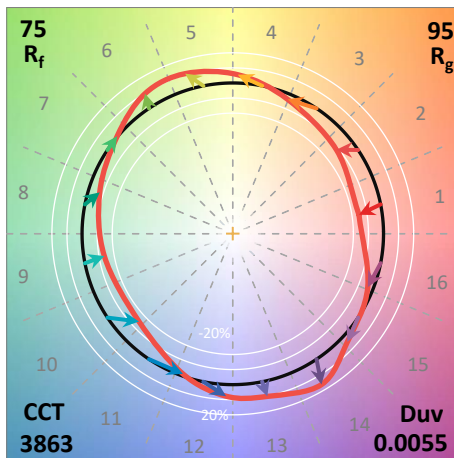
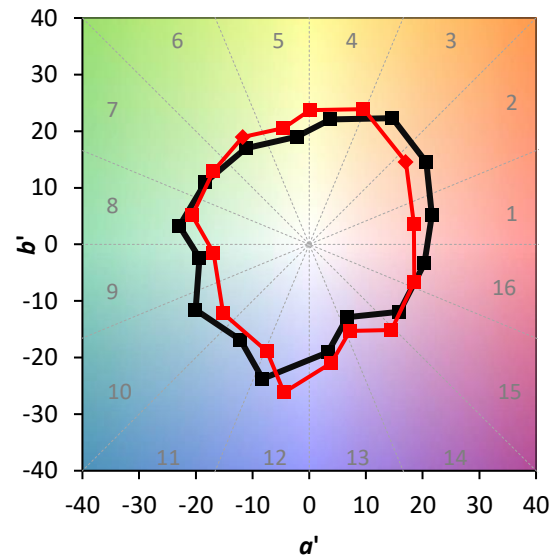
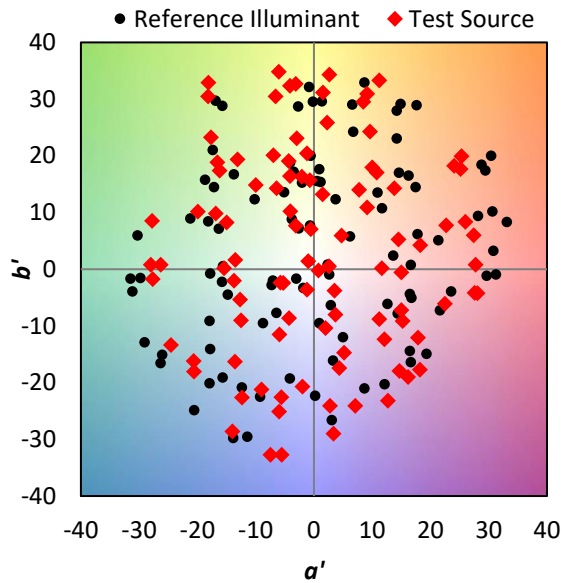
TM-30-18

Summary

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

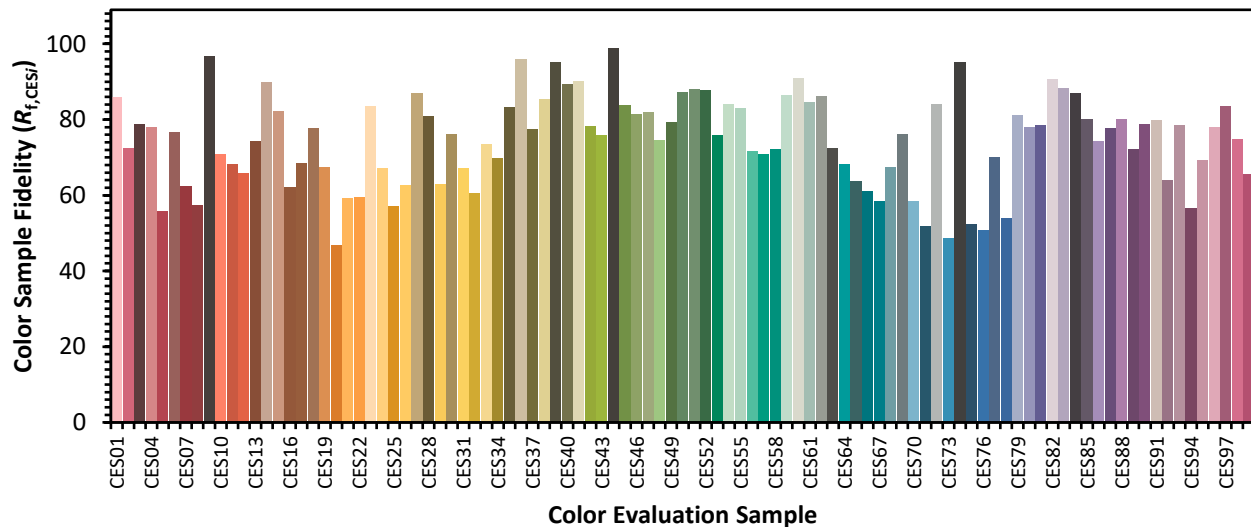


Color Vector Graphics

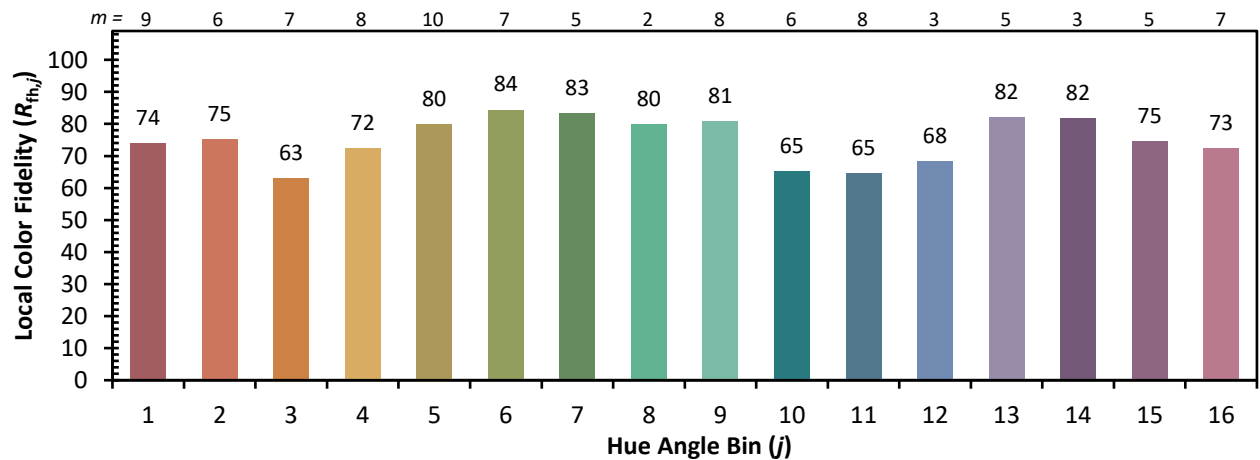
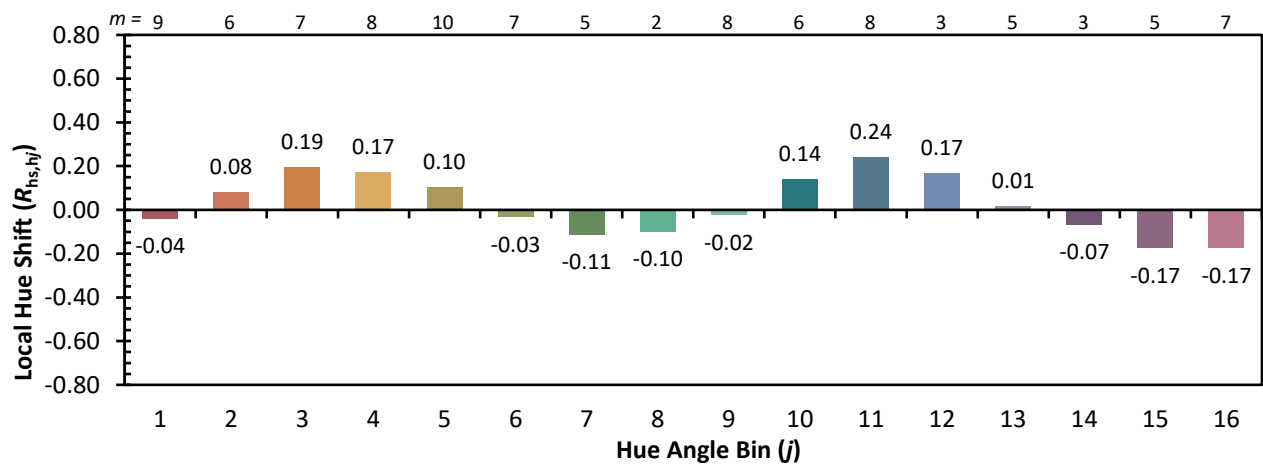
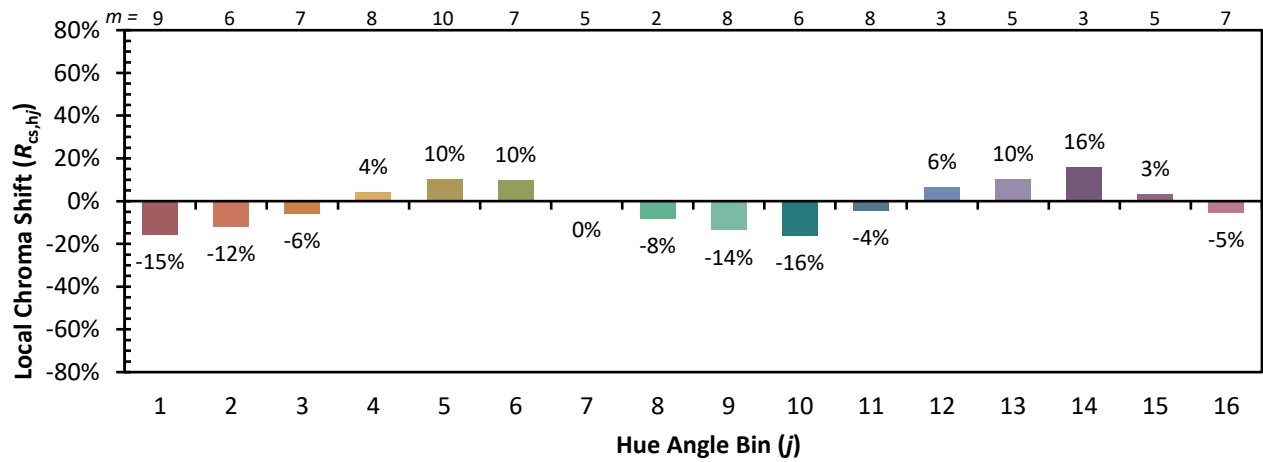


Individual Sample Fidelity Index ($R_{f,i}$)

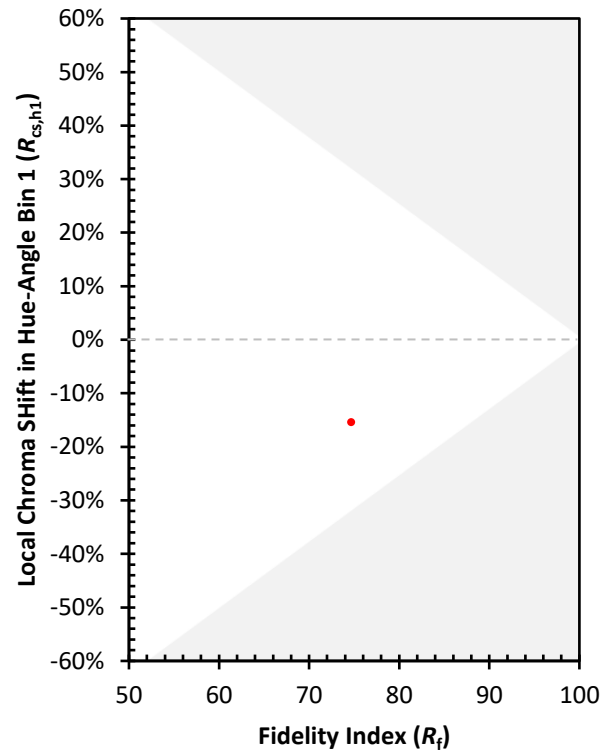
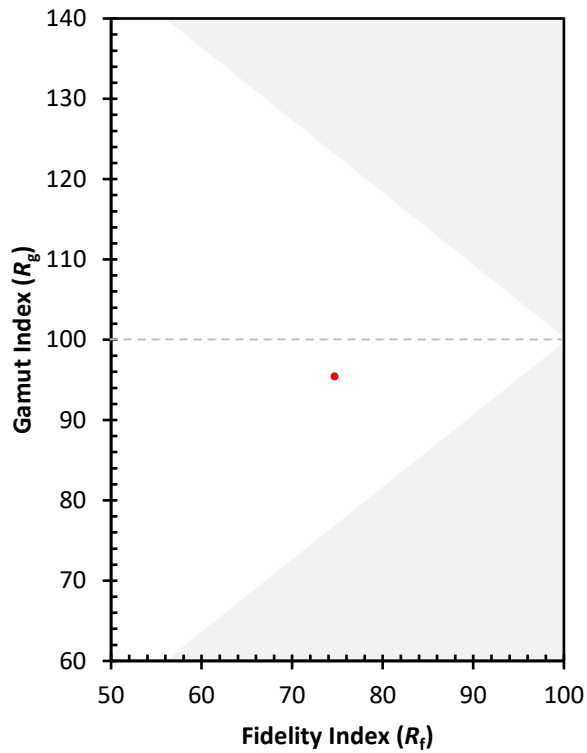
CES01 = 85	CES26 = 63	CES51 = 88	CES76 = 51
CES02 = 61	CES27 = 87	CES52 = 88	CES77 = 70
CES03 = 30	CES28 = 81	CES53 = 76	CES78 = 54
CES04 = 70	CES29 = 63	CES54 = 84	CES79 = 81
CES05 = 47	CES30 = 76	CES55 = 83	CES80 = 78
CES06 = 50	CES31 = 67	CES56 = 72	CES81 = 79
CES07 = 40	CES32 = 61	CES57 = 71	CES82 = 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)