

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: P1445157

Luminaire Tested: TPTN-VA0-830-U-MQ-GM

Issue Date: 05/21/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445157
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: MCGRAW-EDISON
Catalog Number: TPTN-VA0-830-U-MQ-GM
Description: TOPTIER NANO SPIDER MOUNT VISUAL COMFORT LED LUMINAIRE 9W 80CRI 3000K w/ TYP
V MEDIUM DISTRIBUTION OPTIC
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 820.7 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Luminous Opening: Circular (Dia: 0.71' x H: 0')
IES Classification: Type V - 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

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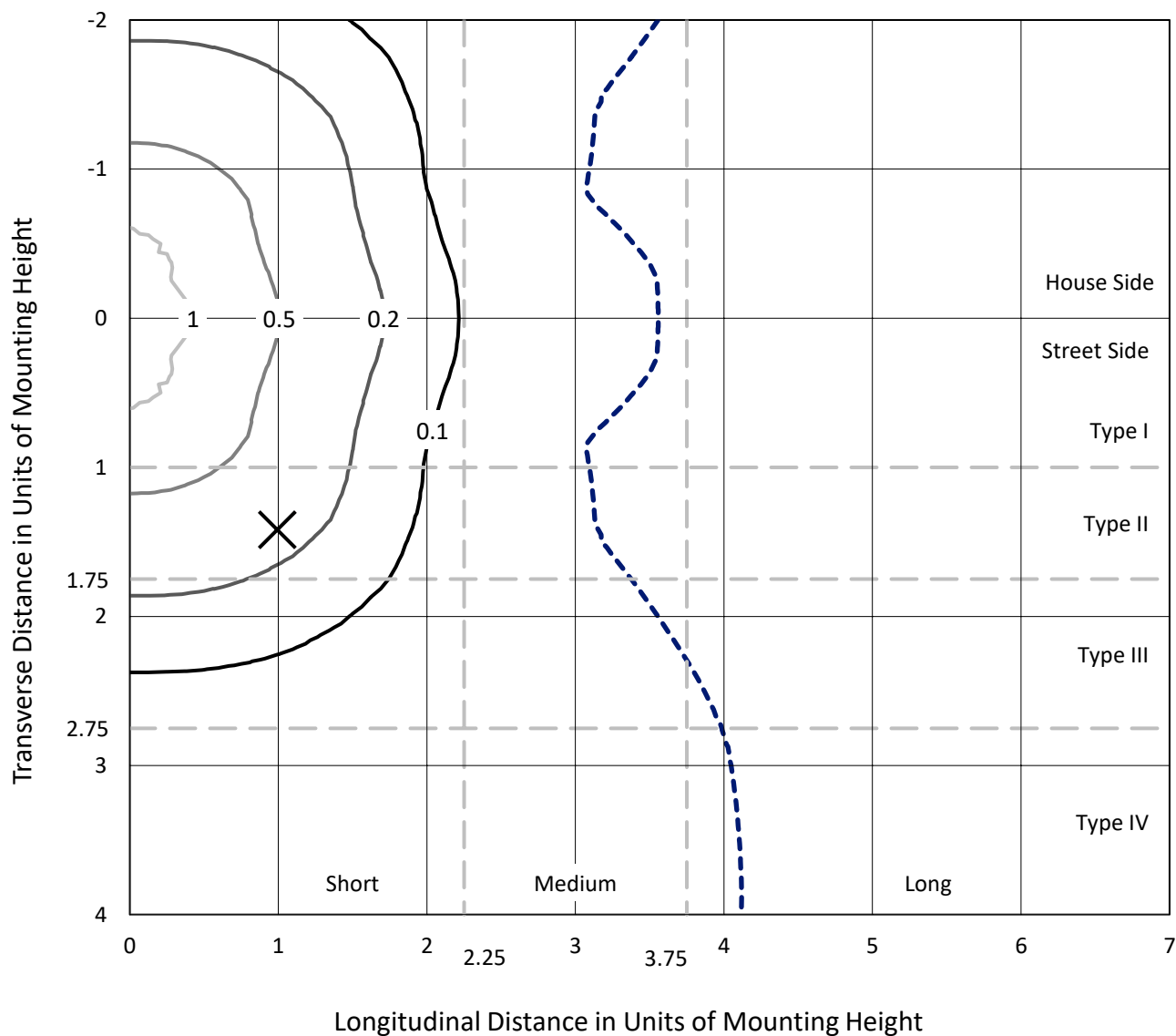
CATALOG NUMBER: TPTN-VA0-830-U-MQ-GM

Iso-Footcandle Lines of Horizontal Illumination

'E

× Max cd

--- 1/2 Max cd

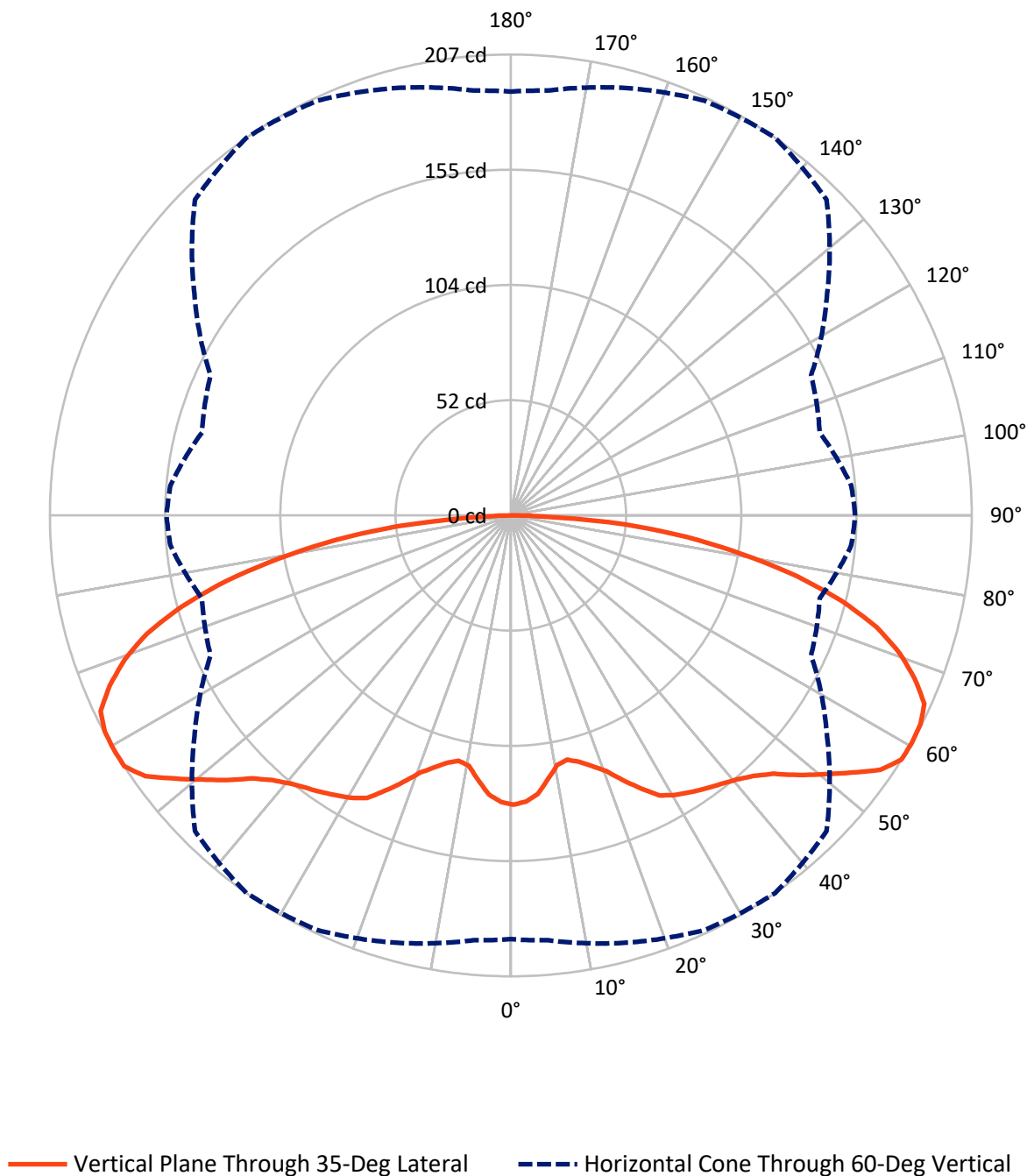


Based on 10 foot mounting height. Maximum calculated value = 1.3 fc
 Type V - Short - N/A

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CATALOG NUMBER: TPTN-VA0-830-U-MQ-GM

Luminous Intensity Polar Plot



REPORT NUMBER: P1445157

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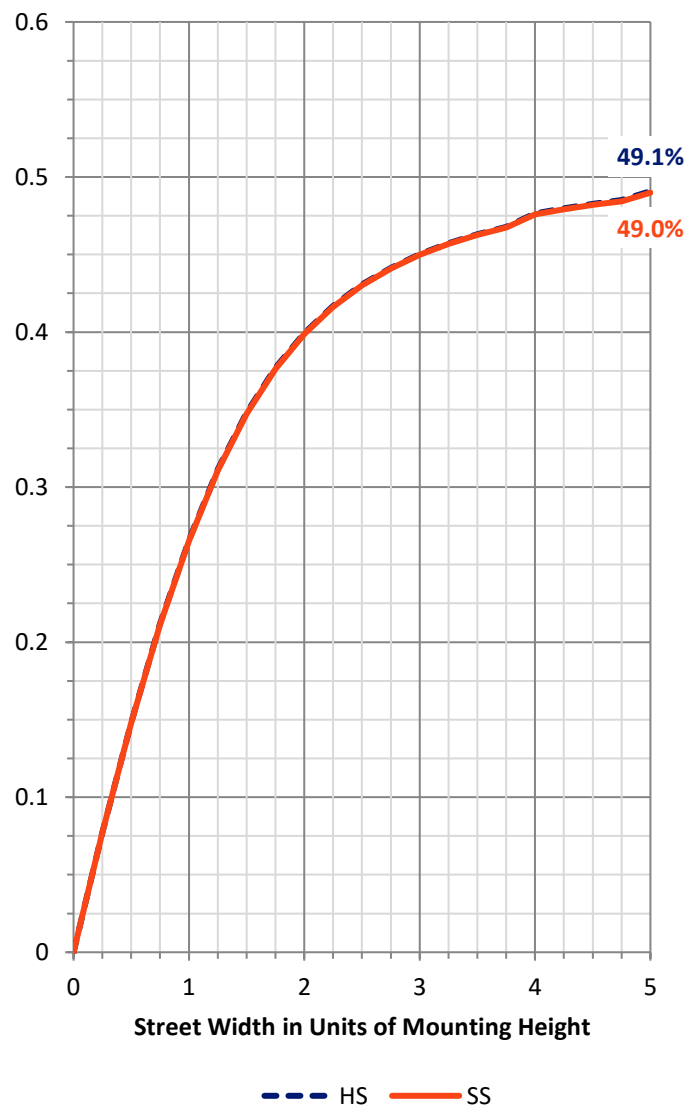
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	410.3	0.0	410.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	410.3	0.0	410.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	820.7	0.0	820.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.7	1.4
10°-20°	33.2	4.1
20°-30°	61.8	7.5
30°-40°	91.9	11.2
40°-50°	122.0	14.9
50°-60°	159.0	19.4
60°-70°	169.7	20.7
70°-80°	130.2	15.9
80°-90°	41.0	5.0
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°	820.7	100.0
0°-180°	820.7	100.0

Coefficient of Utilization



REPORT NUMBER: P1445157

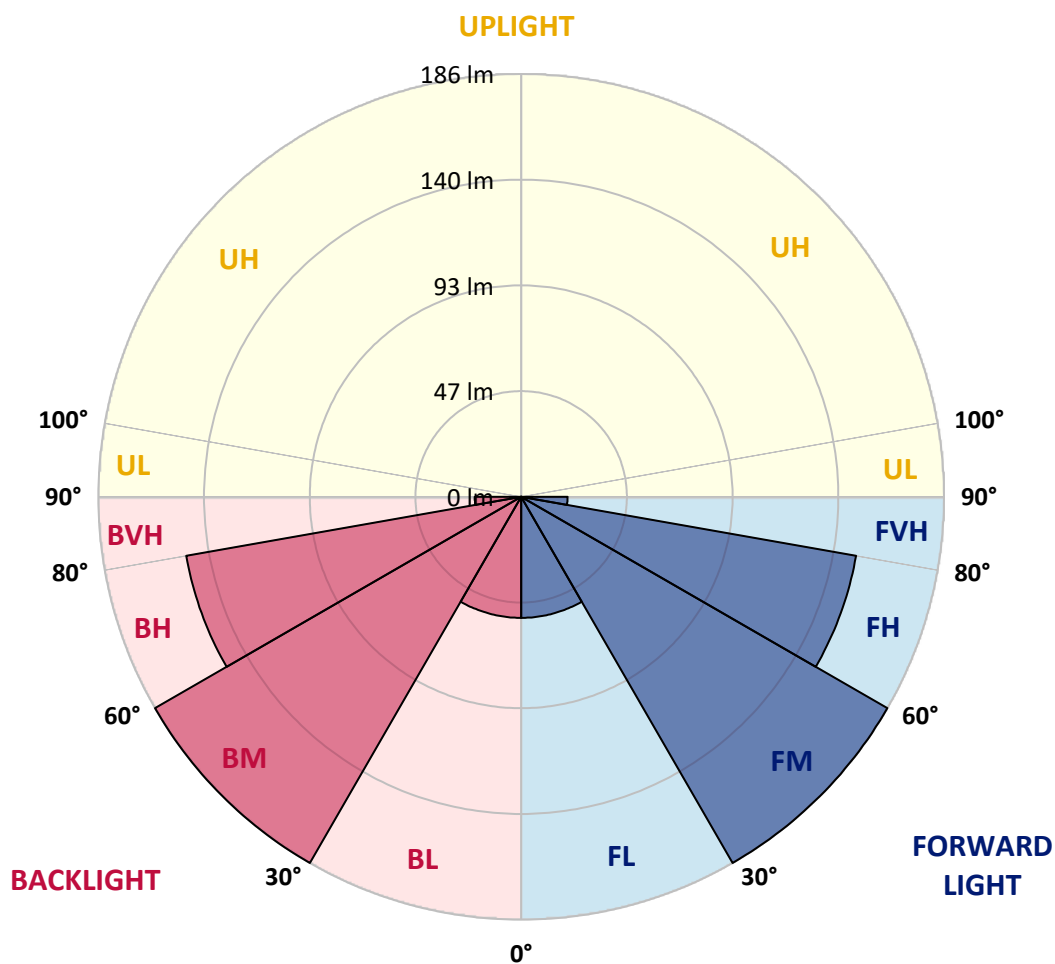
CATALOG NUMBER: TPTN-VA0-830-U-MQ-GM

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	53.4	6.5			
FM	(30°-60°)	186.5	22.7			
FH	(60°-80°)	150.0	18.3			G0/660
FVH	(80°-90°)	20.5	2.5			G1/100
BL	(0°-30°)	53.4	6.5	B0/110		
BM	(30°-60°)	186.5	22.7	B0/220		
BH	(60°-80°)	150.0	18.3	B1/500		G0/660
BVH	(80°-90°)	20.5	2.5			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 V Short



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CATALOG NUMBER: TPTN-VA0-830-U-MQ-GM

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	129.9	129.9	129.9	129.9	129.9	129.9	129.9	129.9	129.9	129.9	129.9
2.5°	128.7	128.7	128.9	128.9	128.7	128.7	128.6	128.6	128.7	128.9	128.9
5°	125.3	125.3	125.3	125.4	125.7	125.8	126.4	126.8	127.2	127.2	127.2
7.5°	119.2	119.0	119.3	119.6	119.7	120.4	121.2	121.8	122.6	123.2	123.3
10°	113.9	113.6	113.7	113.7	114.0	114.7	116.1	117.6	118.7	119.3	119.6
12.5°	111.6	111.6	111.8	112.1	112.6	113.6	115.1	116.8	117.9	118.3	118.5
15°	112.3	112.5	112.9	114.0	114.8	115.4	116.4	117.9	119.0	119.8	119.7
17.5°	114.6	115.0	116.6	117.8	118.3	118.2	118.3	119.3	120.8	121.8	121.9
20°	120.4	120.8	122.4	123.2	122.6	121.7	120.8	121.2	123.2	124.4	124.9
22.5°	129.6	129.7	130.0	130.6	129.2	126.2	123.9	123.9	126.1	127.9	128.3
25°	140.6	140.4	139.9	138.8	135.8	131.4	127.8	126.7	128.5	131.0	131.4
27.5°	150.6	150.9	148.5	145.6	142.4	136.8	131.9	129.6	131.0	133.8	134.3
30°	158.2	157.7	153.6	148.8	145.7	139.6	134.0	131.2	132.4	135.6	136.0
32.5°	163.6	162.7	157.1	151.5	148.2	142.0	135.6	132.4	133.3	136.7	137.1
35°	167.4	166.1	160.0	154.2	150.7	144.0	136.7	132.8	133.8	137.4	137.9
37.5°	169.9	168.8	162.9	157.2	153.1	146.7	137.6	133.5	134.4	138.2	138.6
40°	171.6	170.9	165.9	160.6	156.0	149.6	139.2	134.0	135.0	139.0	139.6
42.5°	173.0	173.0	169.2	164.3	159.9	152.8	141.1	135.0	135.7	140.1	140.8
45°	175.5	175.5	173.5	170.0	165.5	158.1	144.3	137.2	137.4	142.4	142.8
47.5°	179.9	180.2	180.0	177.5	174.2	167.3	150.4	140.8	140.3	146.3	146.7
50°	184.1	184.6	186.6	184.6	182.6	174.9	156.3	143.6	142.9	149.5	149.7
52.5°	188.4	189.2	193.0	194.0	191.9	183.5	162.7	147.8	145.2	152.9	153.5
55°	193.4	193.8	199.1	202.4	201.6	194.9	170.0	151.4	147.8	156.4	157.5
57.5°	193.1	193.7	200.6	205.5	206.9	200.8	173.8	150.9	147.0	155.7	157.1
60°	190.3	191.5	198.7	205.5	207.0	200.5	173.4	148.8	143.6	153.5	154.6
62.5°	187.3	188.9	195.9	203.4	206.5	200.2	172.7	144.9	139.9	151.4	152.0
65°	180.0	181.9	191.7	198.7	204.1	197.7	170.9	139.6	135.3	145.3	145.7
67.5°	169.6	170.9	179.9	191.7	195.6	190.3	163.5	132.8	124.9	135.6	136.4
70°	158.6	159.6	167.4	180.7	185.2	182.3	155.2	123.0	114.3	126.2	127.5
72.5°	143.5	144.7	153.4	165.5	171.8	170.0	144.5	111.1	103.3	114.4	115.0
75°	124.3	126.7	135.6	146.4	153.5	152.8	130.4	97.0	89.5	99.0	98.7
77.5°	104.4	105.7	114.4	125.0	131.4	130.7	111.8	81.5	73.5	81.9	82.2
80°	81.5	82.4	90.8	100.0	105.5	105.8	89.8	64.1	56.9	63.3	63.7
82.5°	57.3	58.4	65.8	74.0	79.5	80.4	68.4	46.3	39.2	43.5	43.2
85°	30.9	31.4	37.3	45.0	51.3	52.8	43.9	28.1	22.0	22.8	22.2
87.5°	7.0	7.2	9.0	10.7	13.6	15.0	12.7	9.3	6.3	4.4	2.8
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: SP1-2411-284-4

Test Date: 11/22/2024

Luminaire Tested: TTN-D0-830-U-WQ

Data in this report applies to families of products including TTN-D0-830-U-WQ

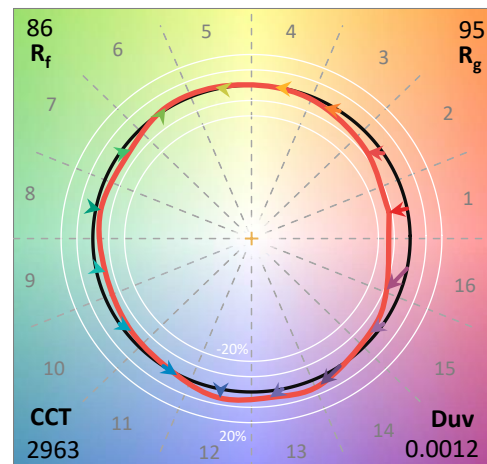
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2411-284-4
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 11/22/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **TTN-D0-830-U-WQ**
 Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE. 3000K, 80 CRI LEDS AND WIDE DISTRIBUTION

Spectral Parameters

CCT (K): 2963
 CIE u' : 0.2515
 CIE v' : 0.5238
 Duv: 0.0012
 CIE x: 0.4414
 CIE y: 0.4086
 CIE z: 0.1501
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 582
 Purity: 55.12798
 R_f: 86.1
 R_g: 94.9

CRI (Ra): 82.9
 R1: 81.4
 R2: 91.9
 R3: 95.2
 R4: 81.6
 R5: 82.3
 R6: 91.4
 R7: 82.0
 R8: 57.2
 R9: 3.9
 R10: 82.5
 R11: 82.3
 R12: 76.5
 R13: 83.9
 R14: 97.8
 R15: 72.6



Test Conditions

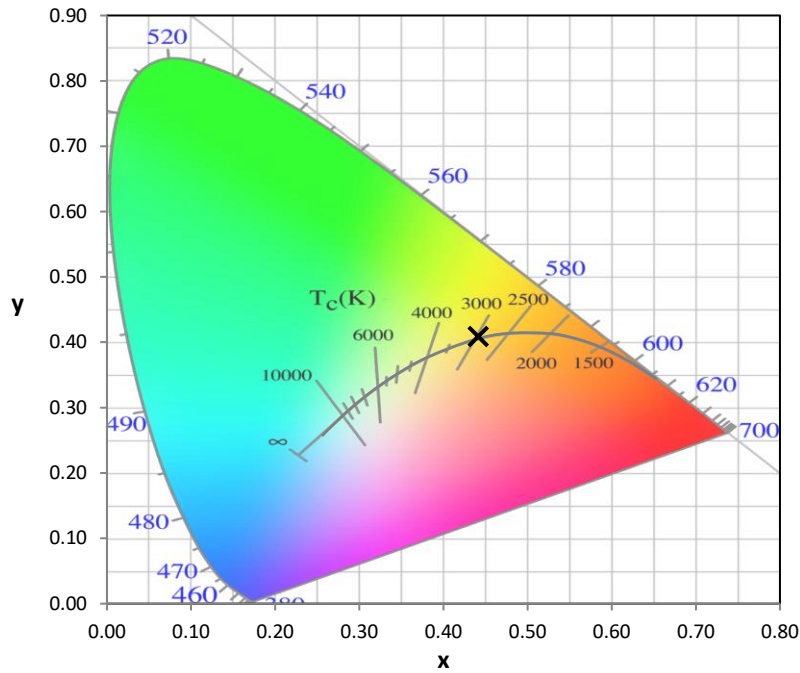
Stabilization Time: 37M
 Operation Time: 1H 37M
 Sphere Temperature (°C): 25.0

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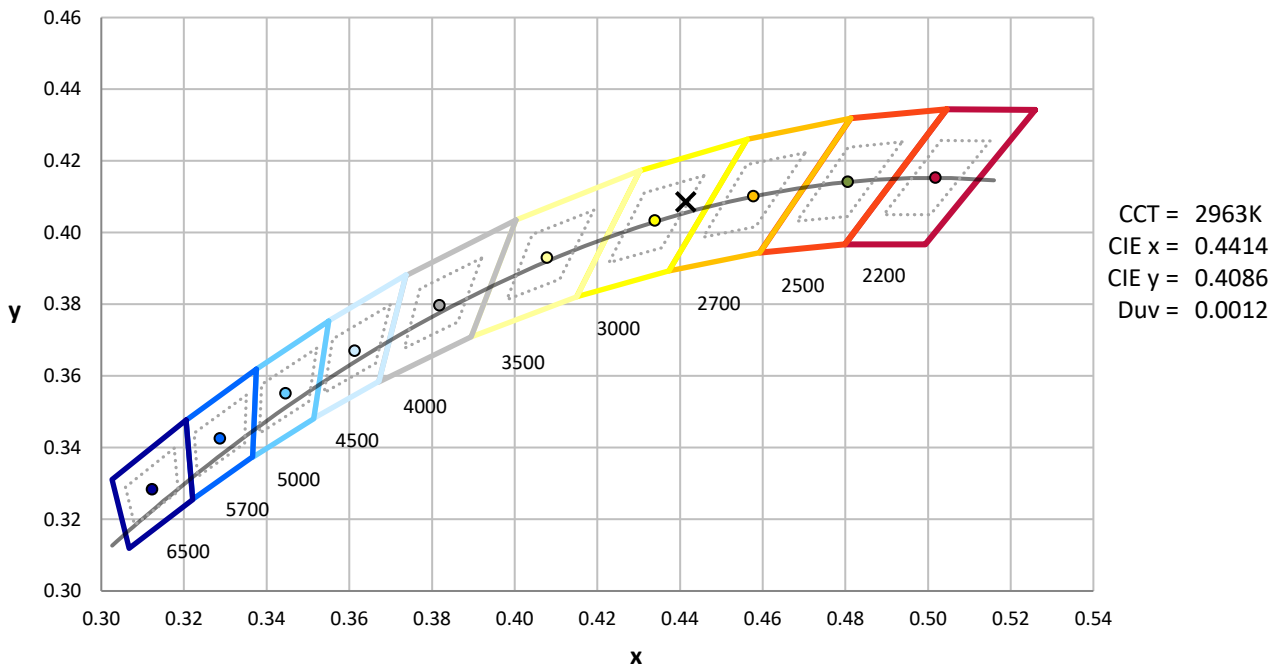
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



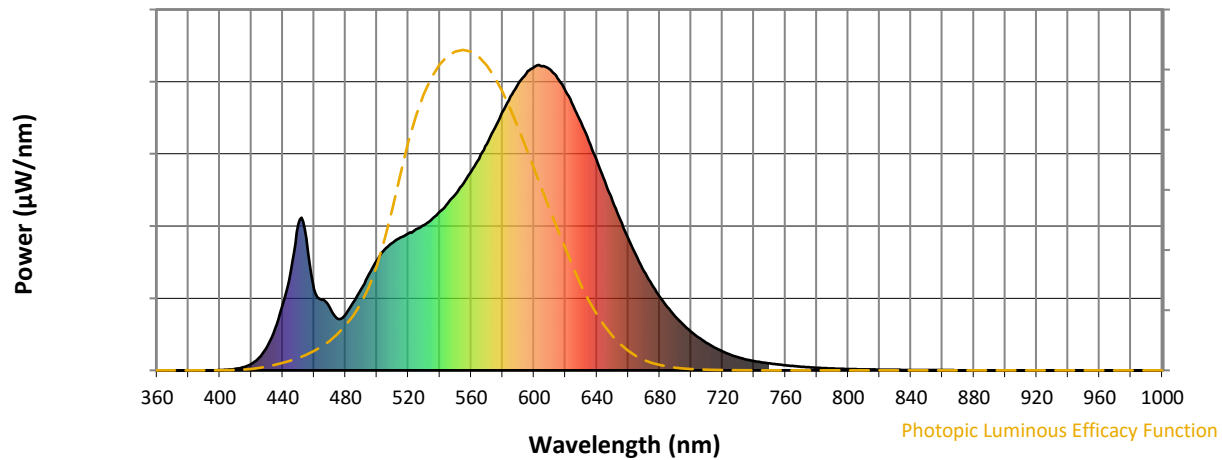
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

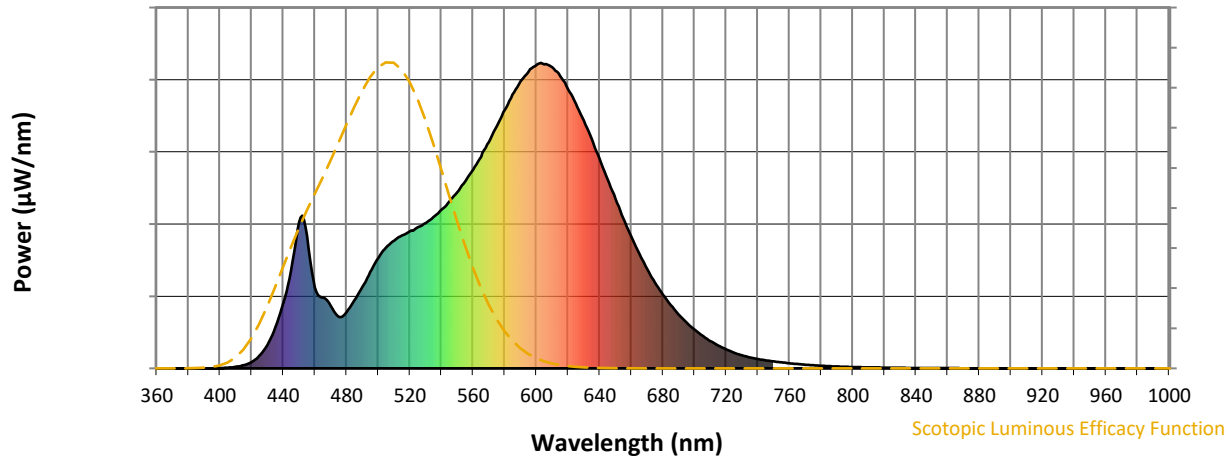


Photopic Lumens: NR

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	267	NR	620	915	NR	750	23	NR	880	0	NR
365	0	NR	495	315	NR	625	866	NR	755	20	NR	885	0	NR
370	0	NR	500	360	NR	630	811	NR	760	17	NR	890	0	NR
375	0	NR	505	396	NR	635	750	NR	765	14	NR	895	0	NR
380	0	NR	510	418	NR	640	686	NR	770	12	NR	900	0	NR
385	0	NR	515	435	NR	645	619	NR	775	10	NR	905	0	NR
390	0	NR	520	448	NR	650	554	NR	780	9	NR	910	0	NR
395	0	NR	525	462	NR	655	491	NR	785	7	NR	915	0	NR
400	1	NR	530	476	NR	660	431	NR	790	6	NR	920	0	NR
405	2	NR	535	495	NR	665	376	NR	795	5	NR	925	0	NR
410	5	NR	540	520	NR	670	325	NR	800	4	NR	930	0	NR
415	10	NR	545	547	NR	675	280	NR	805	4	NR	935	0	NR
420	21	NR	550	576	NR	680	241	NR	810	3	NR	940	0	NR
425	42	NR	555	612	NR	685	207	NR	815	3	NR	945	0	NR
430	77	NR	560	651	NR	690	176	NR	820	2	NR	950	0	NR
435	135	NR	565	693	NR	695	149	NR	825	2	NR	955	0	NR
440	215	NR	570	741	NR	700	127	NR	830	2	NR	960	0	NR
445	321	NR	575	793	NR	705	107	NR	835	2	NR	965	0	NR
450	479	NR	580	847	NR	710	89	NR	840	1	NR	970	0	NR
455	432	NR	585	897	NR	715	75	NR	845	1	NR	975	0	NR
460	265	NR	590	940	NR	720	62	NR	850	1	NR	980	0	NR
465	231	NR	595	971	NR	725	51	NR	855	1	NR	985	0	NR
470	204	NR	600	993	NR	730	43	NR	860	1	NR	990	0	NR
475	168	NR	605	996	NR	735	36	NR	865	1	NR	995	0	NR
480	183	NR	610	986	NR	740	31	NR	870	1	NR	1000	0	NR
485	223	NR	615	957	NR	745	26	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



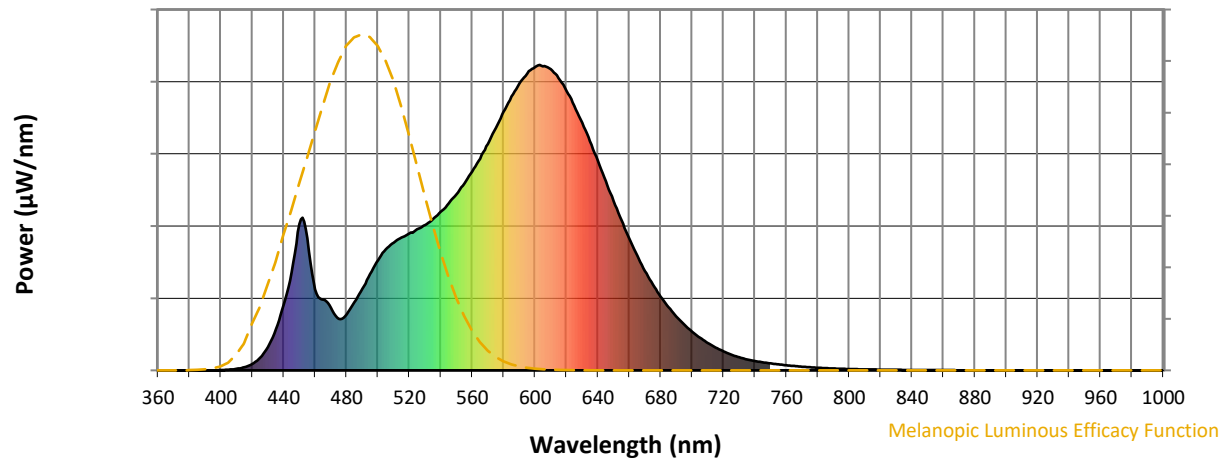
Scotopic Lumens: NR

S/P: 1.34

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	267	NR	620	915	NR	750	23	NR	880	0	NR
365	0	NR	495	315	NR	625	866	NR	755	20	NR	885	0	NR
370	0	NR	500	360	NR	630	811	NR	760	17	NR	890	0	NR
375	0	NR	505	396	NR	635	750	NR	765	14	NR	895	0	NR
380	0	NR	510	418	NR	640	686	NR	770	12	NR	900	0	NR
385	0	NR	515	435	NR	645	619	NR	775	10	NR	905	0	NR
390	0	NR	520	448	NR	650	554	NR	780	9	NR	910	0	NR
395	0	NR	525	462	NR	655	491	NR	785	7	NR	915	0	NR
400	1	NR	530	476	NR	660	431	NR	790	6	NR	920	0	NR
405	2	NR	535	495	NR	665	376	NR	795	5	NR	925	0	NR
410	5	NR	540	520	NR	670	325	NR	800	4	NR	930	0	NR
415	10	NR	545	547	NR	675	280	NR	805	4	NR	935	0	NR
420	21	NR	550	576	NR	680	241	NR	810	3	NR	940	0	NR
425	42	NR	555	612	NR	685	207	NR	815	3	NR	945	0	NR
430	77	NR	560	651	NR	690	176	NR	820	2	NR	950	0	NR
435	135	NR	565	693	NR	695	149	NR	825	2	NR	955	0	NR
440	215	NR	570	741	NR	700	127	NR	830	2	NR	960	0	NR
445	321	NR	575	793	NR	705	107	NR	835	2	NR	965	0	NR
450	479	NR	580	847	NR	710	89	NR	840	1	NR	970	0	NR
455	432	NR	585	897	NR	715	75	NR	845	1	NR	975	0	NR
460	265	NR	590	940	NR	720	62	NR	850	1	NR	980	0	NR
465	231	NR	595	971	NR	725	51	NR	855	1	NR	985	0	NR
470	204	NR	600	993	NR	730	43	NR	860	1	NR	990	0	NR
475	168	NR	605	996	NR	735	36	NR	865	1	NR	995	0	NR
480	183	NR	610	986	NR	740	31	NR	870	1	NR	1000	0	NR
485	223	NR	615	957	NR	745	26	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.58

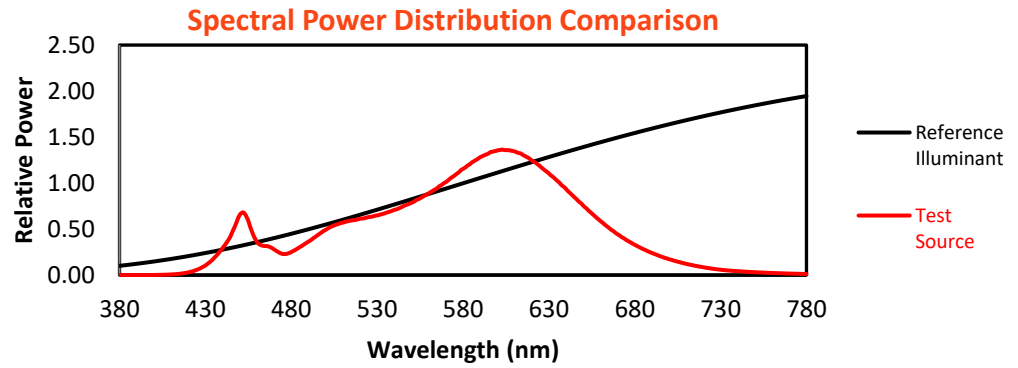
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	267	NR	620	915	NR	750	23	NR	880	0	NR
365	0	NR	495	315	NR	625	866	NR	755	20	NR	885	0	NR
370	0	NR	500	360	NR	630	811	NR	760	17	NR	890	0	NR
375	0	NR	505	396	NR	635	750	NR	765	14	NR	895	0	NR
380	0	NR	510	418	NR	640	686	NR	770	12	NR	900	0	NR
385	0	NR	515	435	NR	645	619	NR	775	10	NR	905	0	NR
390	0	NR	520	448	NR	650	554	NR	780	9	NR	910	0	NR
395	0	NR	525	462	NR	655	491	NR	785	7	NR	915	0	NR
400	1	NR	530	476	NR	660	431	NR	790	6	NR	920	0	NR
405	2	NR	535	495	NR	665	376	NR	795	5	NR	925	0	NR
410	5	NR	540	520	NR	670	325	NR	800	4	NR	930	0	NR
415	10	NR	545	547	NR	675	280	NR	805	4	NR	935	0	NR
420	21	NR	550	576	NR	680	241	NR	810	3	NR	940	0	NR
425	42	NR	555	612	NR	685	207	NR	815	3	NR	945	0	NR
430	77	NR	560	651	NR	690	176	NR	820	2	NR	950	0	NR
435	135	NR	565	693	NR	695	149	NR	825	2	NR	955	0	NR
440	215	NR	570	741	NR	700	127	NR	830	2	NR	960	0	NR
445	321	NR	575	793	NR	705	107	NR	835	2	NR	965	0	NR
450	479	NR	580	847	NR	710	89	NR	840	1	NR	970	0	NR
455	432	NR	585	897	NR	715	75	NR	845	1	NR	975	0	NR
460	265	NR	590	940	NR	720	62	NR	850	1	NR	980	0	NR
465	231	NR	595	971	NR	725	51	NR	855	1	NR	985	0	NR
470	204	NR	600	993	NR	730	43	NR	860	1	NR	990	0	NR
475	168	NR	605	996	NR	735	36	NR	865	1	NR	995	0	NR
480	183	NR	610	986	NR	740	31	NR	870	1	NR	1000	0	NR
485	223	NR	615	957	NR	745	26	NR	875	0	NR			

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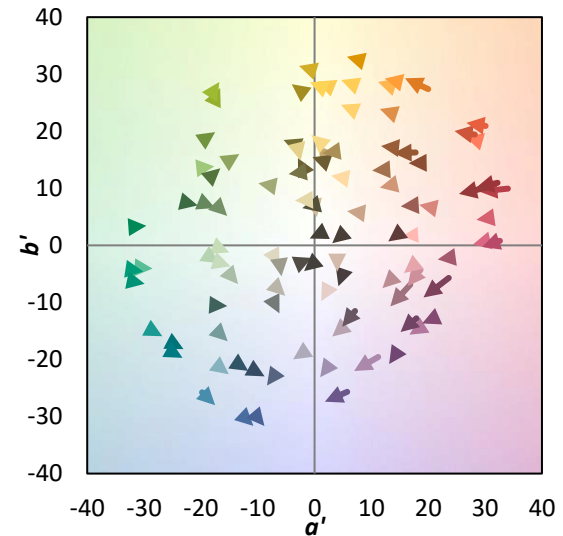
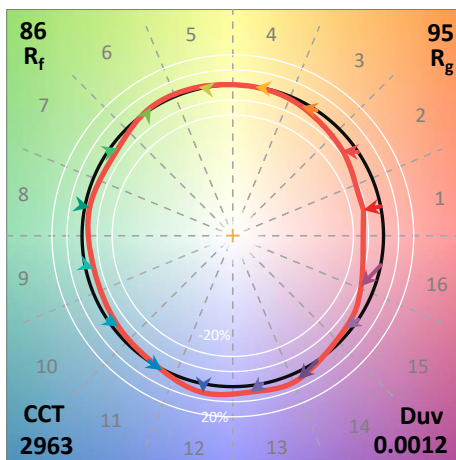
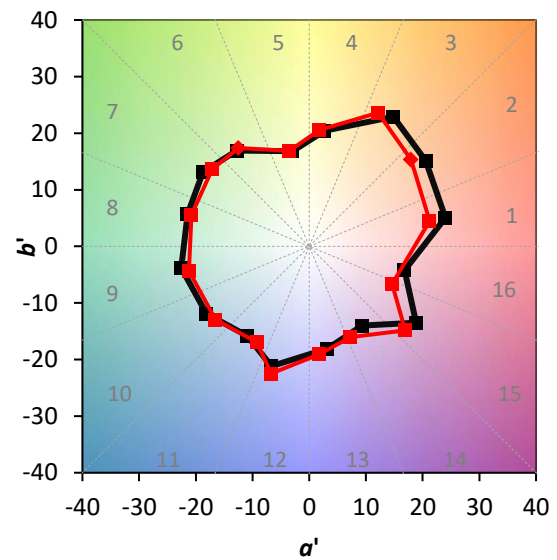
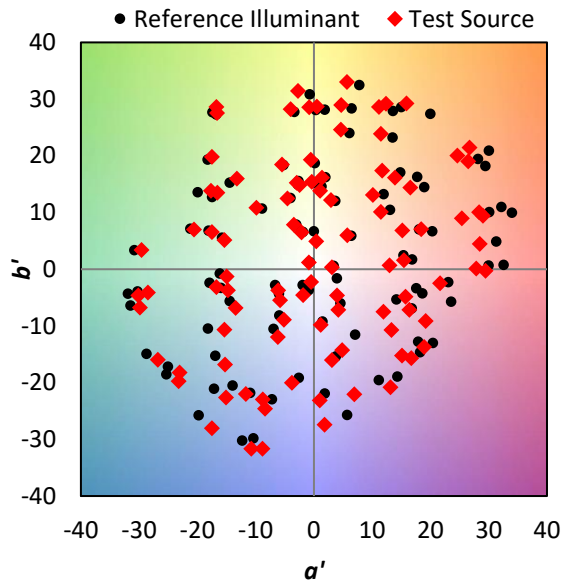
TM-30-18

Summary

$R_f = 86.1$
 $R_g = 94.9$
 $CIE R_a = 82.9$
 $R_9 = 3.9$

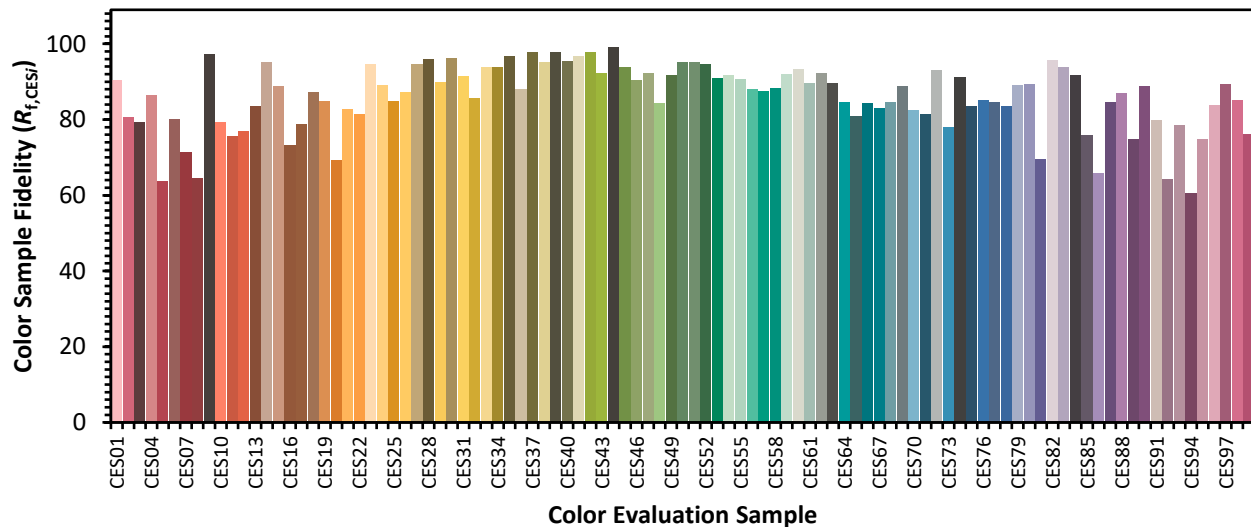


Color Vector Graphics

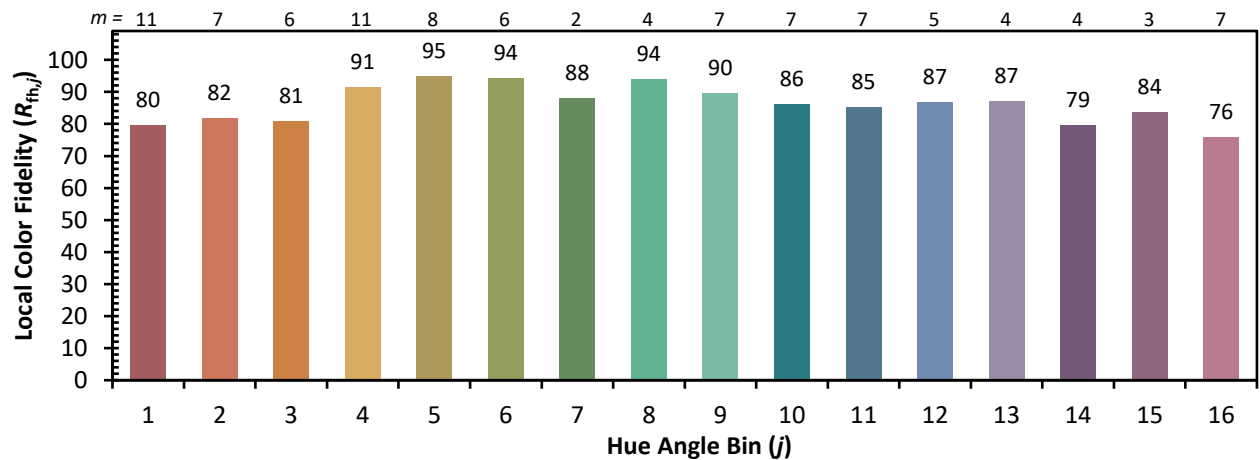
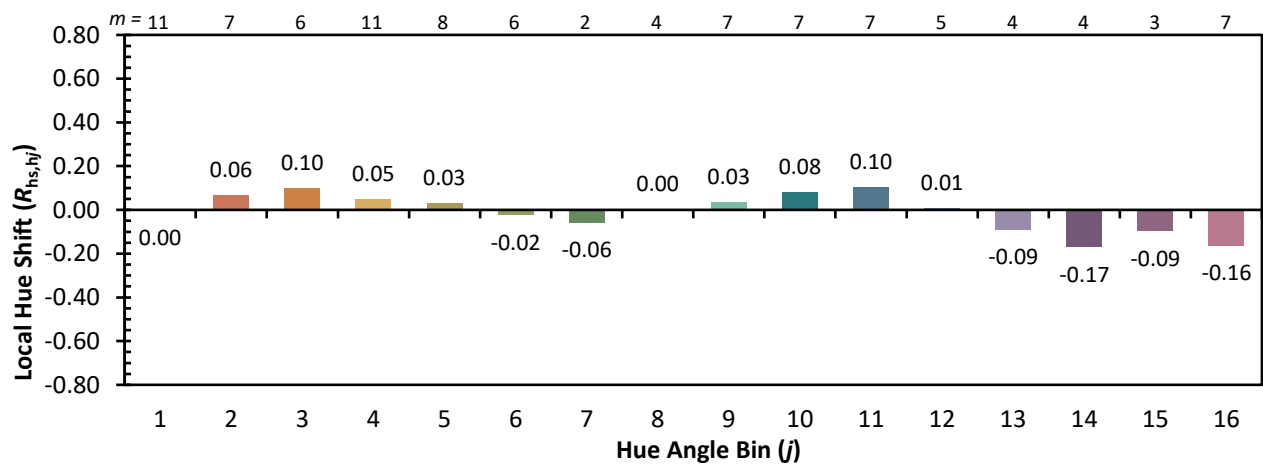
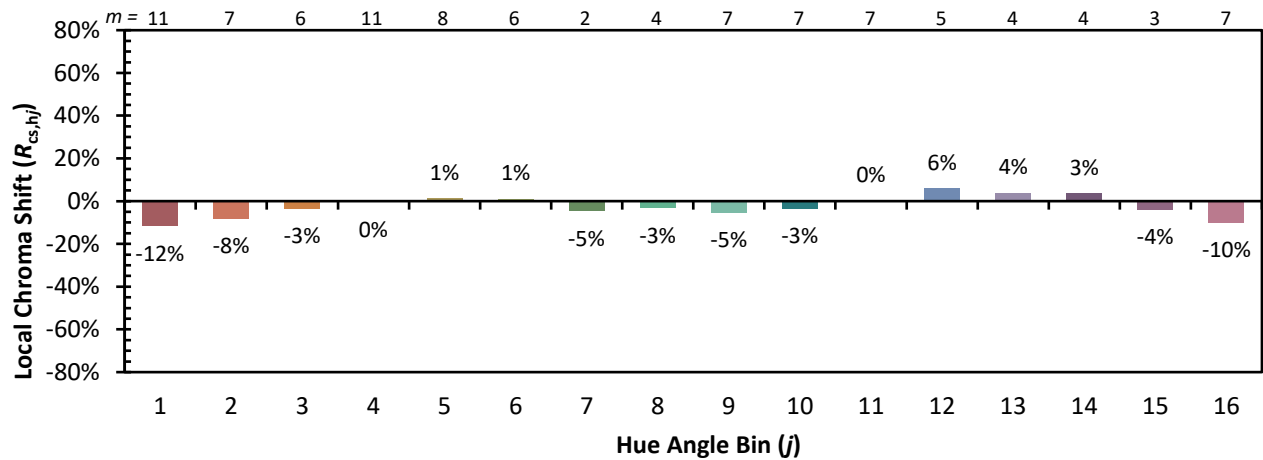


Individual Sample Fidelity Index ($R_{f,i}$)

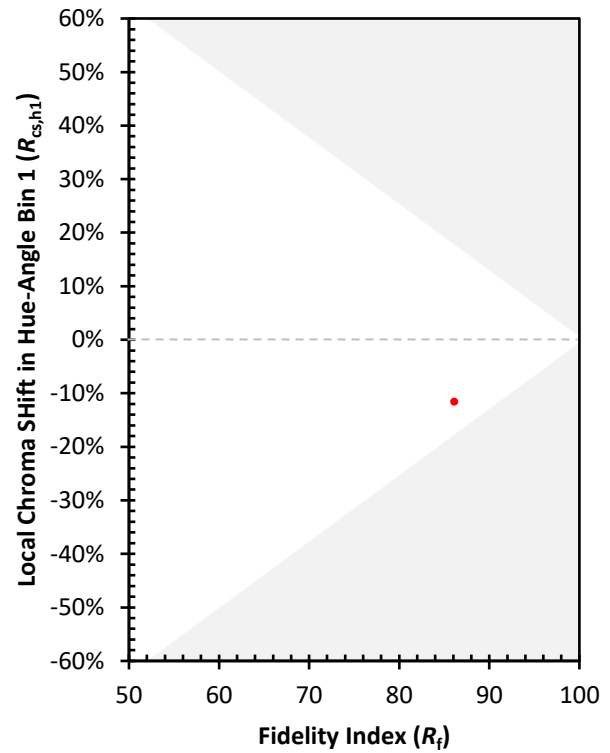
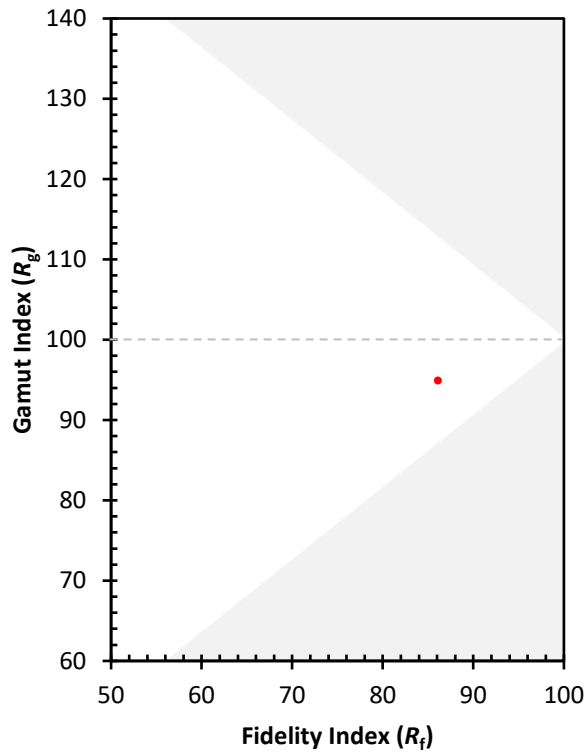
CES01 = 86	CES26 = 87	CES51 = 95	CES76 = 85
CES02 = 63	CES27 = 95	CES52 = 95	CES77 = 85
CES03 = 31	CES28 = 96	CES53 = 91	CES78 = 83
CES04 = 70	CES29 = 90	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 96	CES55 = 91	CES80 = 89
CES06 = 51	CES31 = 92	CES56 = 88	CES81 = 70
CES07 = 42	CES32 = 86	CES57 = 87	CES82 = 96
CES08 = 41	CES33 = 94	CES58 = 88	CES83 = 94
CES09 = 29	CES34 = 94	CES59 = 92	CES84 = 92
CES10 = 76	CES35 = 97	CES60 = 93	CES85 = 76
CES11 = 59	CES36 = 88	CES61 = 90	CES86 = 66
CES12 = 65	CES37 = 98	CES62 = 92	CES87 = 85
CES13 = 44	CES38 = 95	CES63 = 90	CES88 = 87
CES14 = 74	CES39 = 98	CES64 = 85	CES89 = 75
CES15 = 72	CES40 = 96	CES65 = 81	CES90 = 89
CES16 = 48	CES41 = 97	CES66 = 84	CES91 = 80
CES17 = 50	CES42 = 98	CES67 = 83	CES92 = 64
CES18 = 57	CES43 = 92	CES68 = 85	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 89	CES94 = 61
CES20 = 67	CES45 = 94	CES70 = 83	CES95 = 75
CES21 = 87	CES46 = 91	CES71 = 81	CES96 = 84
CES22 = 79	CES47 = 92	CES72 = 93	CES97 = 89
CES23 = 92	CES48 = 84	CES73 = 78	CES98 = 85
CES24 = 91	CES49 = 92	CES74 = 91	CES99 = 76
CES25 = 72	CES50 = 95	CES75 = 84	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)