

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: P1445142

Luminaire Tested: TPTN-VA1-830-U-WQ-CG-GM

Issue Date: 05/21/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445142
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: MCGRAW-EDISON
Catalog Number: TPTN-VA1-830-U-WQ-CG-GM
Description: TOPTIER NANO SPIDER MOUNT VISUAL COMFORT LED LUMINAIRE 27W 80CRI 3000K w/
TYPE V WIDE DISTRIBUTION OPTIC AND GLASS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2459.2 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Luminous Opening: Circular (Dia: 0.71' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

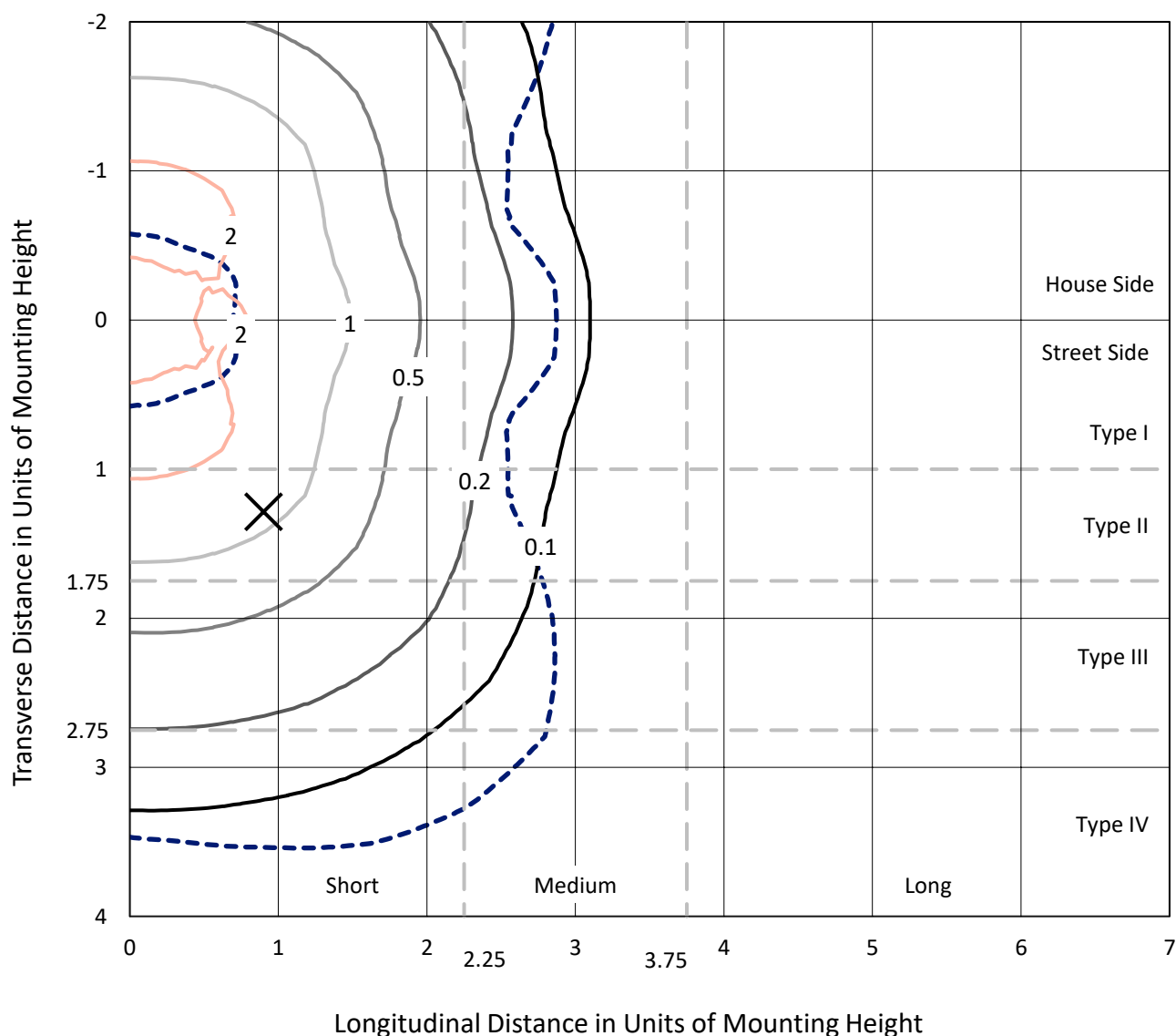
Input Watts (W): 26.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.98
Total Harmonic Distortion (THDi): 11.9%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

REPORT NUMBER: P1445142

CATALOG NUMBER: TPTN-VA1-830-U-WQ-CG-GM

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

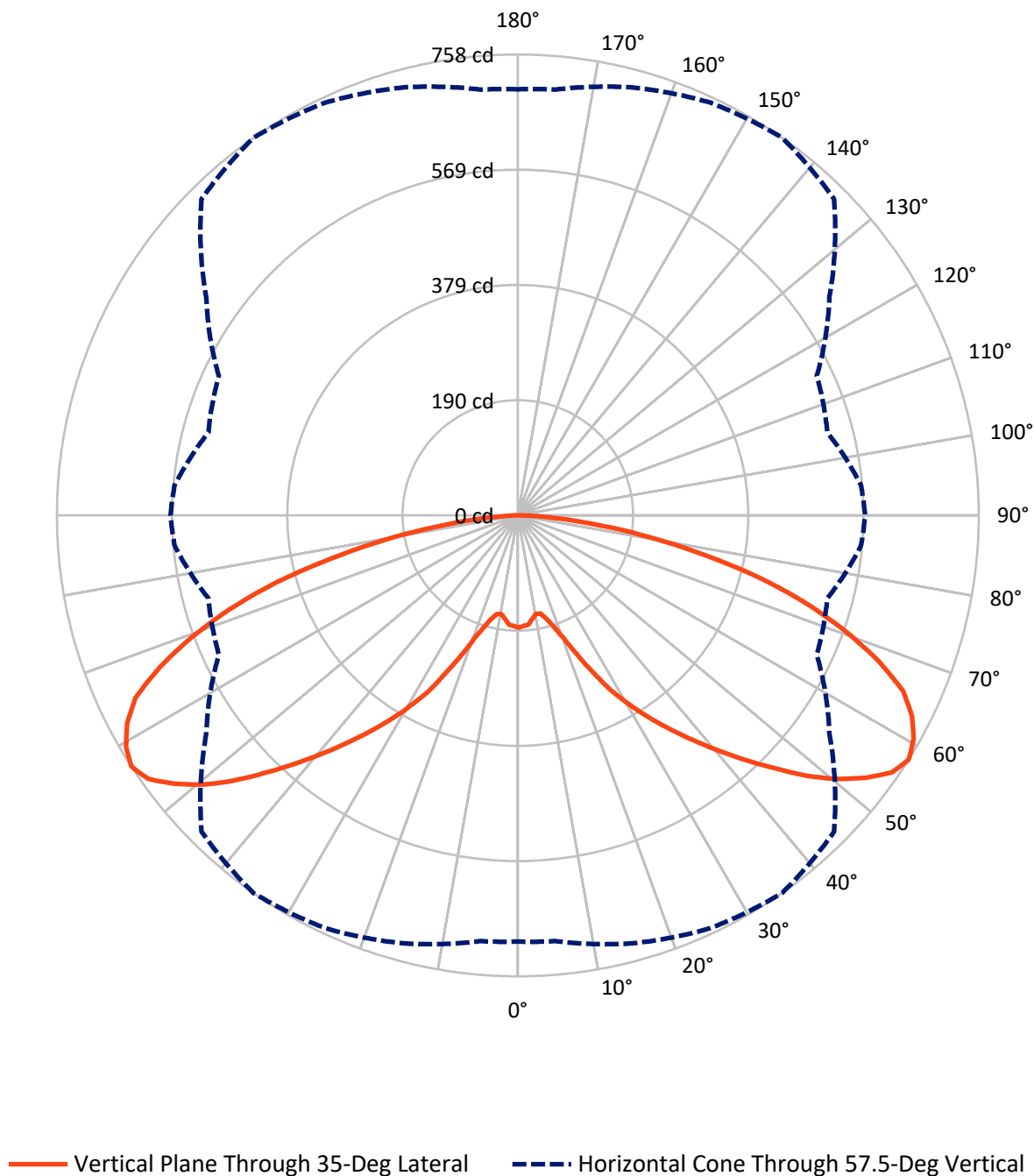


Based on 10 foot mounting height. Maximum calculated value = 2.5 fc
 Type IV - Short - N/A

REPORT NUMBER: P1445142

CATALOG NUMBER: TPTN-VA1-830-U-WQ-CG-GM

Luminous Intensity Polar Plot



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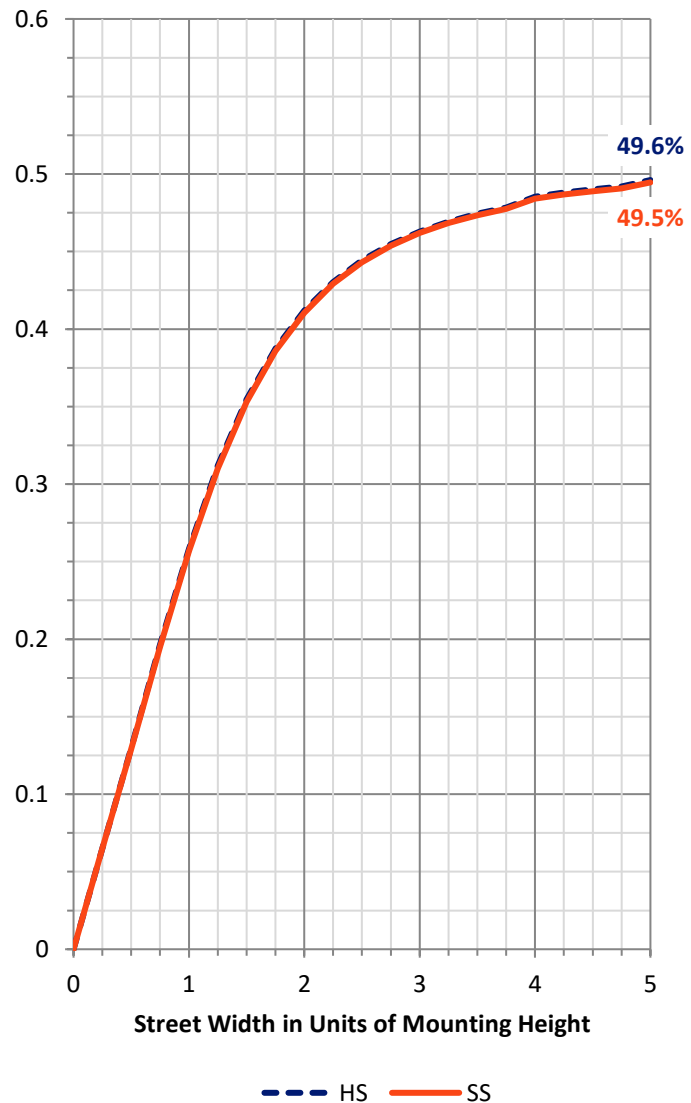
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1229.6	0.0	1229.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1229.6	0.0	1229.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	2459.2	0.0	2459.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.8	0.7
10°-20°	52.8	2.1
20°-30°	130.0	5.3
30°-40°	256.1	10.4
40°-50°	419.9	17.1
50°-60°	578.5	23.5
60°-70°	575.5	23.4
70°-80°	354.7	14.4
80°-90°	75.0	3.1
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°	2459.2	100.0
0°-180°	2459.2	100.0

Coefficient of Utilization



REPORT NUMBER: P1445142

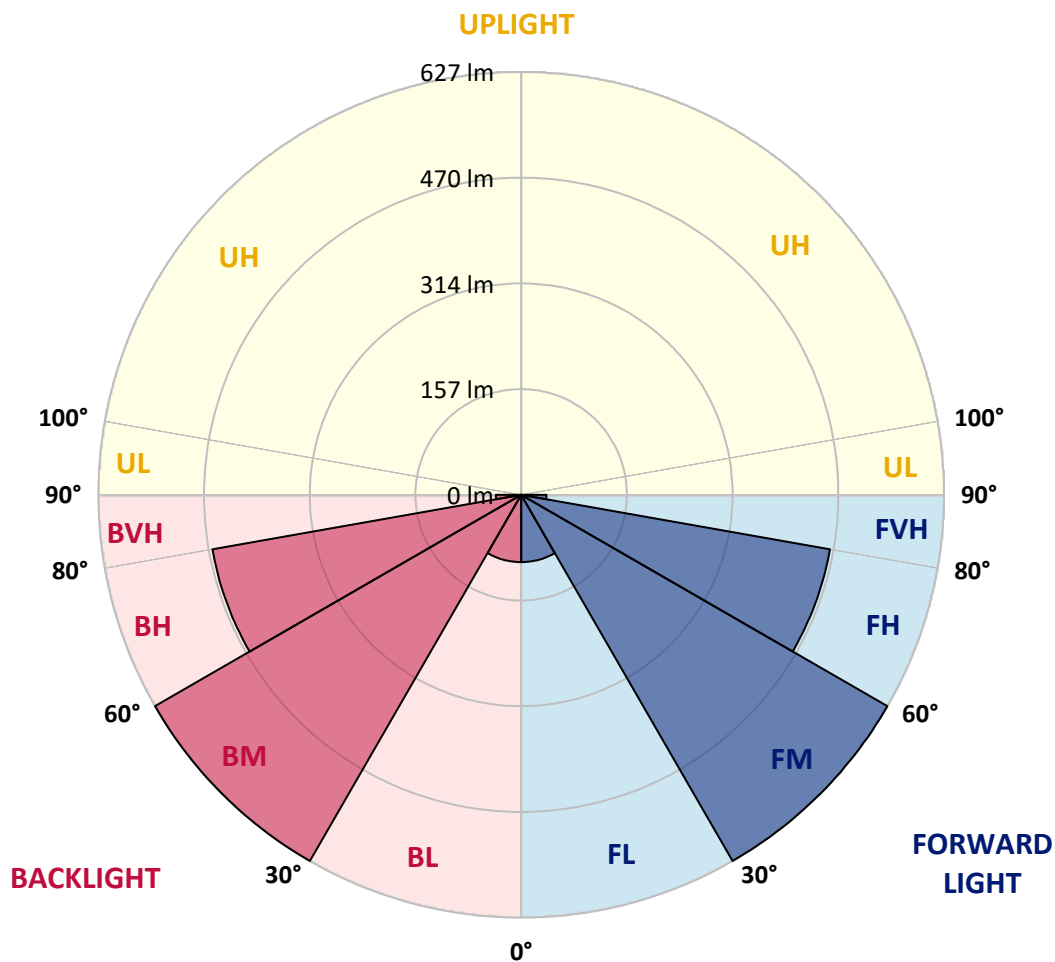
CATALOG NUMBER: TPTN-VA1-830-U-WQ-CG-GM

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

				Zone Rating/Lumen Limit		
Zone		Lumens	% Fixture	B	U	G
FL	(0°-30°)	99.8	4.1			
FM	(30°-60°)	627.2	25.5			
FH	(60°-80°)	465.1	18.9			G0/660
FVH	(80°-90°)	37.5	1.5			G1/100
BL	(0°-30°)	99.8	4.1	B0/110		
BM	(30°-60°)	627.2	25.5	B1/1000		
BH	(60°-80°)	465.1	18.9	B1/500		G1/500
BVH	(80°-90°)	37.5	1.5			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: P1445142

CATALOG NUMBER: TPTN-VA1-830-U-WQ-CG-GM

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.5
2.5°	182.5	182.5	182.5	182.5	182.0	182.0	182.0	182.5	182.9	183.3	183.3
5°	180.8	180.8	180.4	180.0	180.4	180.8	182.0	182.9	183.7	184.1	184.1
7.5°	170.2	169.8	170.6	171.4	171.8	173.0	175.1	176.3	178.0	178.4	178.4
10°	164.0	164.0	164.0	164.0	164.5	166.1	169.0	171.8	174.7	176.3	176.3
12.5°	165.3	165.3	165.7	164.9	165.7	166.9	170.6	174.7	178.0	179.6	180.4
15°	174.3	174.3	174.7	175.9	176.3	175.9	178.4	183.3	187.0	190.2	190.6
17.5°	188.2	189.4	192.3	193.5	192.7	190.6	191.0	194.7	200.9	205.0	206.2
20°	213.5	213.1	217.6	216.8	215.2	209.9	207.0	210.3	218.0	224.2	225.8
22.5°	250.4	249.1	251.6	252.8	247.5	236.0	229.5	230.3	239.7	247.9	251.2
25°	294.1	292.9	295.8	293.3	283.9	269.2	256.1	253.6	263.5	274.5	276.5
27.5°	338.3	339.1	338.3	334.2	325.2	305.2	287.2	279.4	289.2	301.9	303.5
30°	380.0	380.5	375.1	368.6	360.4	335.9	314.6	304.4	313.8	327.3	328.5
32.5°	418.9	418.9	409.9	402.1	396.4	368.2	343.2	330.1	336.3	351.8	354.3
35°	458.6	455.7	444.3	439.0	432.0	403.4	371.9	353.5	360.0	378.0	379.6
37.5°	497.0	493.8	481.1	475.4	469.2	442.6	400.5	378.8	384.1	405.4	407.5
40°	530.6	530.6	519.5	513.8	508.5	480.7	431.2	405.4	408.7	432.8	435.7
42.5°	564.9	566.6	558.8	554.7	550.2	519.1	463.1	432.0	434.0	461.0	462.7
45°	600.1	601.4	600.1	598.5	593.6	562.5	497.5	459.8	460.2	488.5	490.5
47.5°	634.1	637.8	640.2	642.7	639.8	610.4	533.5	488.0	484.0	517.9	519.5
50°	664.8	666.8	677.0	678.7	681.5	652.1	565.4	510.1	504.8	539.2	542.5
52.5°	686.9	688.5	704.0	715.9	716.7	685.6	591.9	531.0	519.1	557.2	559.2
55°	702.8	705.3	725.3	743.7	746.2	721.6	615.3	544.5	529.4	569.4	573.5
57.5°	700.8	702.8	728.6	749.0	758.0	735.5	625.5	542.5	526.9	566.6	571.1
60°	684.4	688.5	713.4	738.4	747.8	723.7	616.1	529.8	511.8	553.1	556.4
62.5°	659.0	664.8	689.3	713.4	727.4	704.4	600.1	505.2	488.5	532.2	535.1
65°	615.3	623.9	654.9	676.2	696.3	672.9	575.6	475.0	459.0	496.6	497.0
67.5°	560.4	562.9	593.6	627.9	640.2	623.0	532.2	435.7	410.7	447.1	448.0
70°	496.2	502.0	523.2	562.9	572.7	564.9	478.2	385.8	358.0	396.0	397.6
72.5°	423.8	429.5	449.2	482.7	497.5	491.7	418.1	326.9	302.7	335.9	335.0
75°	341.6	346.5	368.2	395.2	412.0	407.5	347.3	265.5	243.8	270.0	270.4
77.5°	256.9	263.5	281.5	308.0	315.0	312.1	267.5	201.7	184.5	201.3	200.9
80°	179.6	183.3	198.0	211.9	224.6	222.5	190.2	141.1	126.4	137.9	135.8
82.5°	106.8	110.0	120.3	130.1	138.3	140.7	120.7	85.9	77.3	81.4	78.1
85°	49.9	52.4	58.1	65.5	71.2	72.8	63.8	43.8	37.6	37.6	33.1
87.5°	12.7	13.1	16.8	20.5	23.3	25.8	22.5	17.6	14.3	9.4	5.7
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

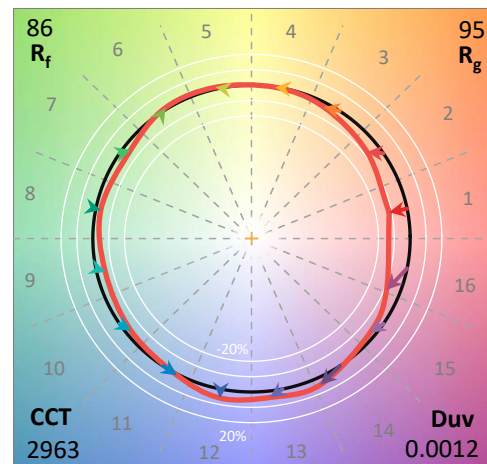
Test Information

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

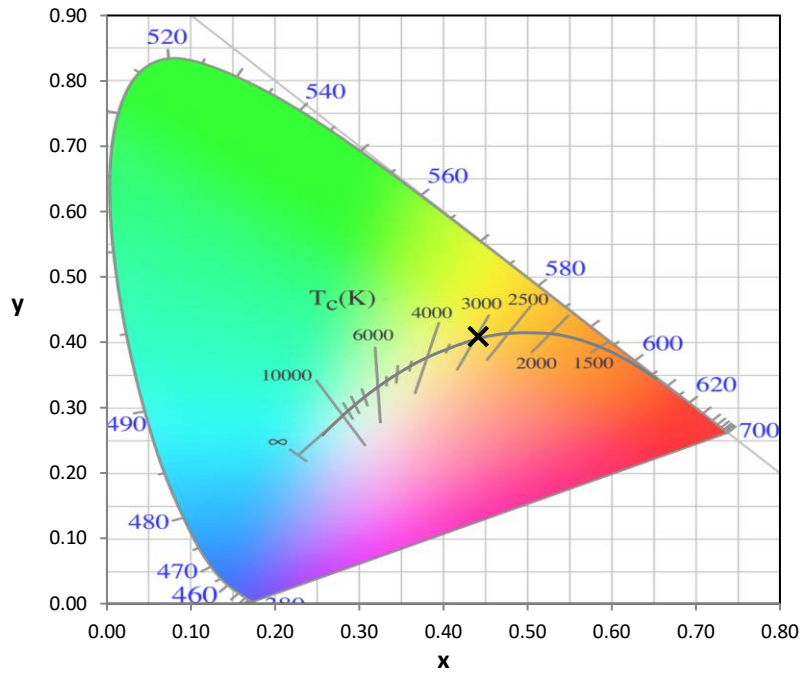
Stabilization Time: 37M
 Operation Time: 1H 37M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2411-284-4

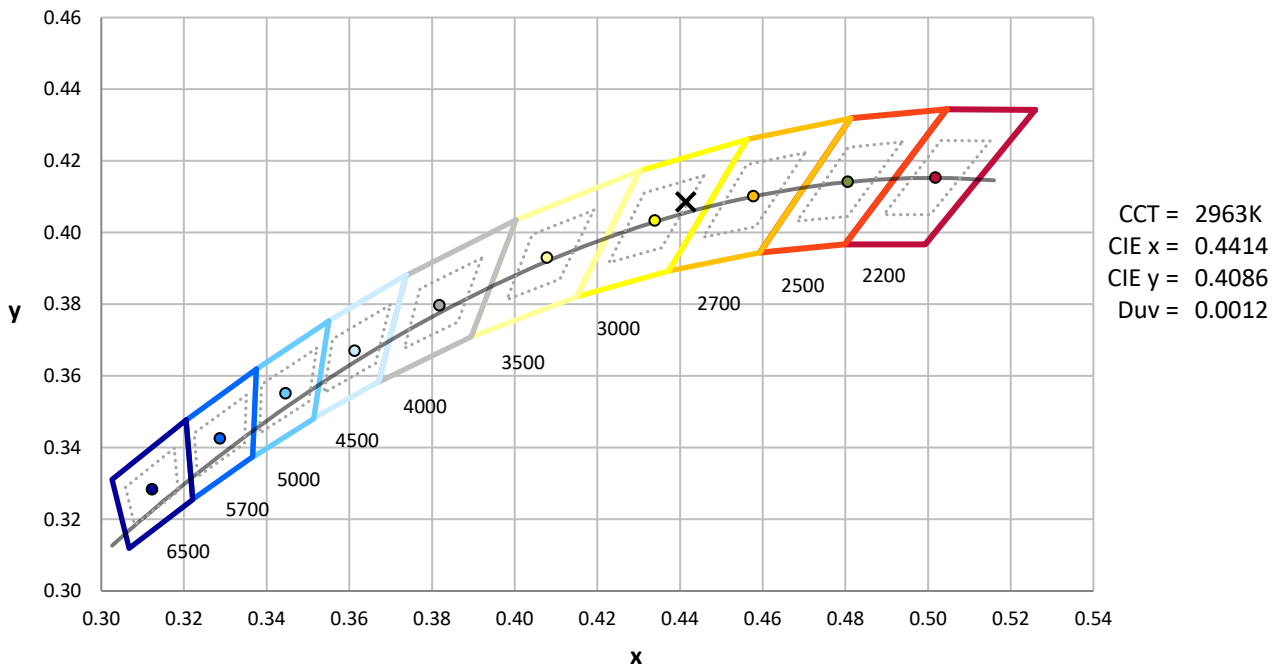
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2411-284-4

CIE 1931 Chromaticity Diagram



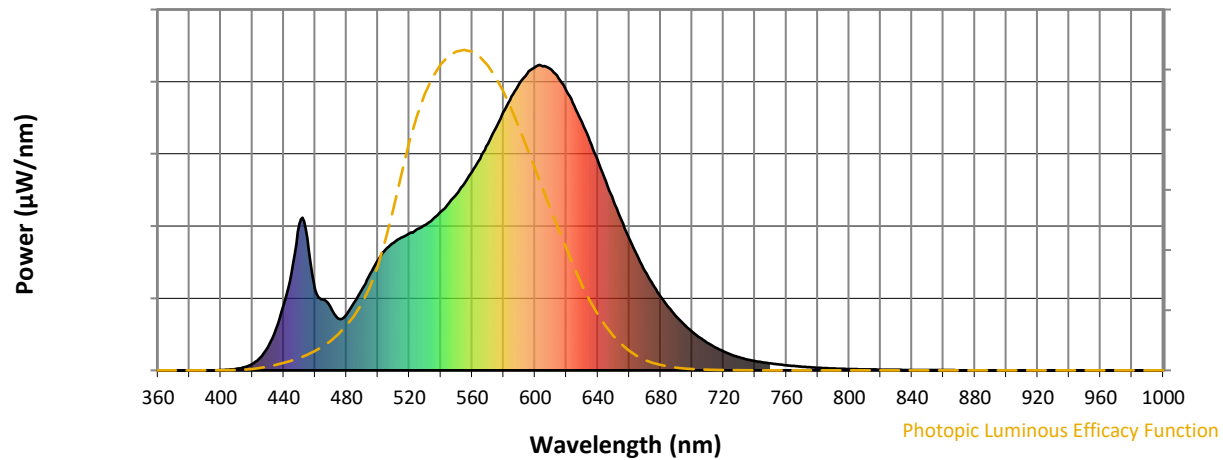
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2411-284-4

Photopic Flux vs. Wavelength

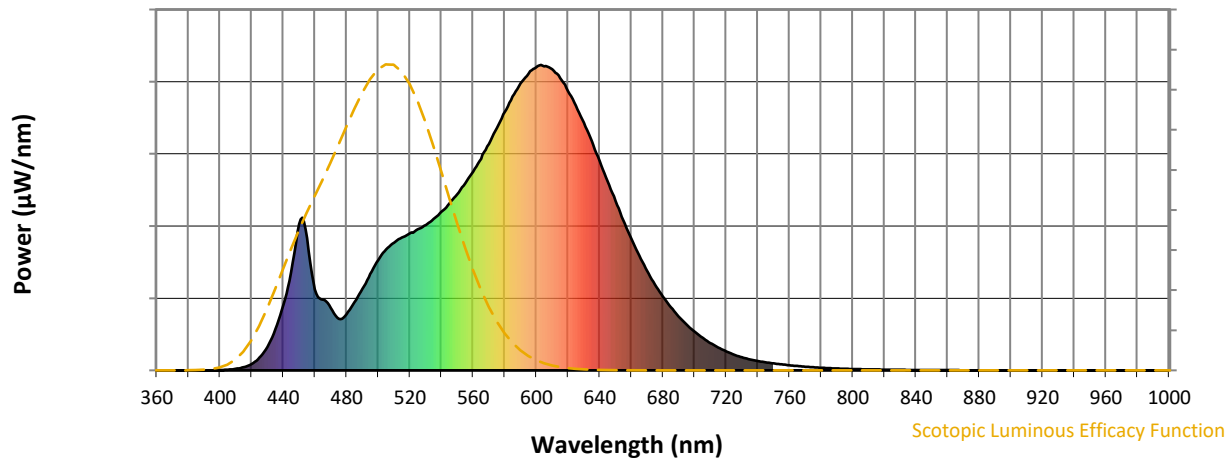


Photopic Lumens: NR

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	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			

REPORT NUMBER: SP1-2411-284-4

Scotopic Flux vs. Wavelength



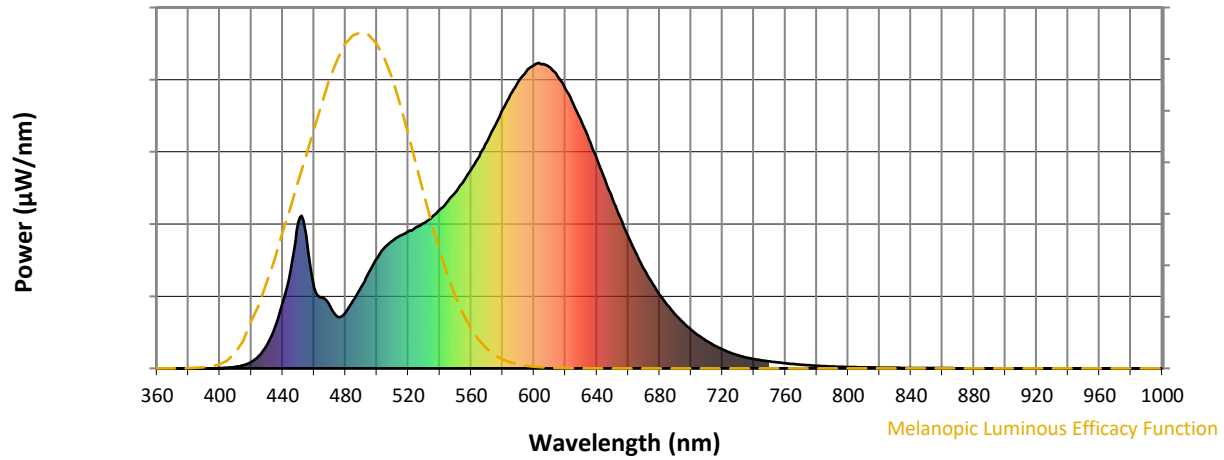
Scotopic Lumens: NR

S/P: 1.34

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	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			

REPORT NUMBER: SP1-2411-284-4

Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.58

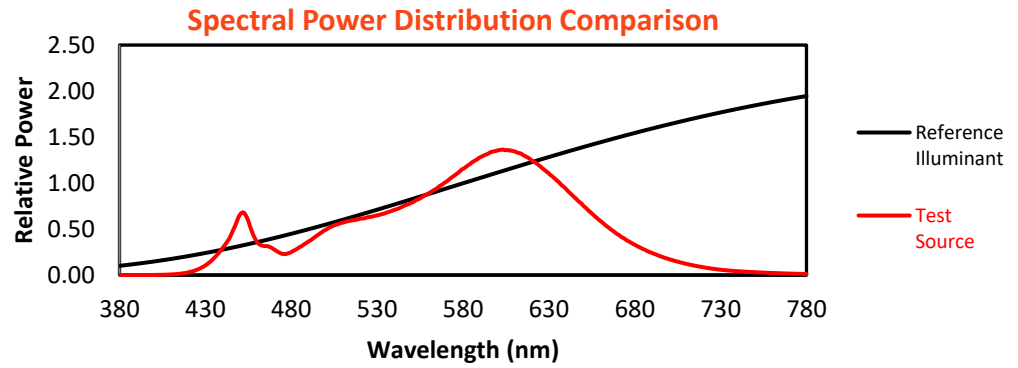
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	267	NR	620	915	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			

REPORT NUMBER: SP1-2411-284-4

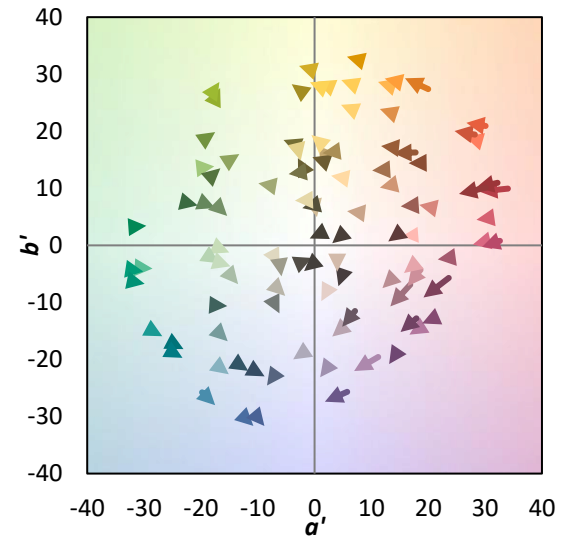
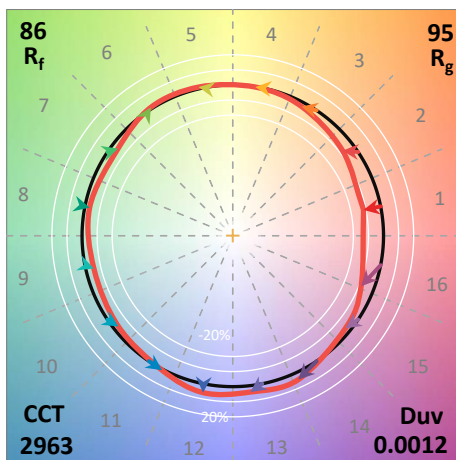
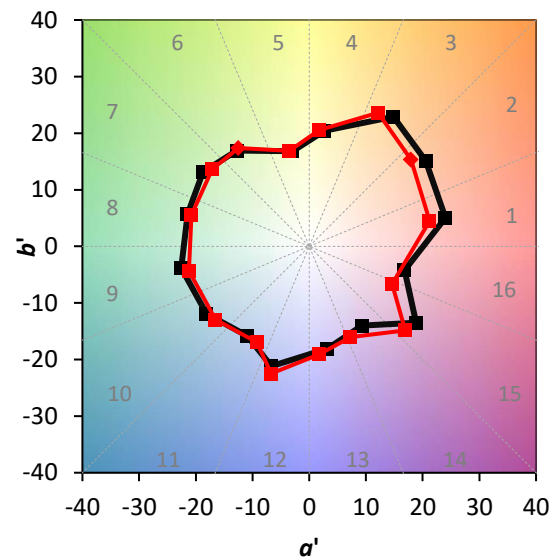
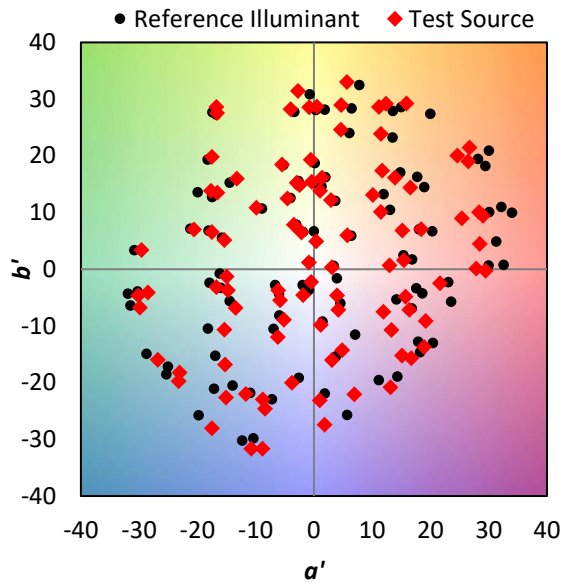
TM-30-18

Summary

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

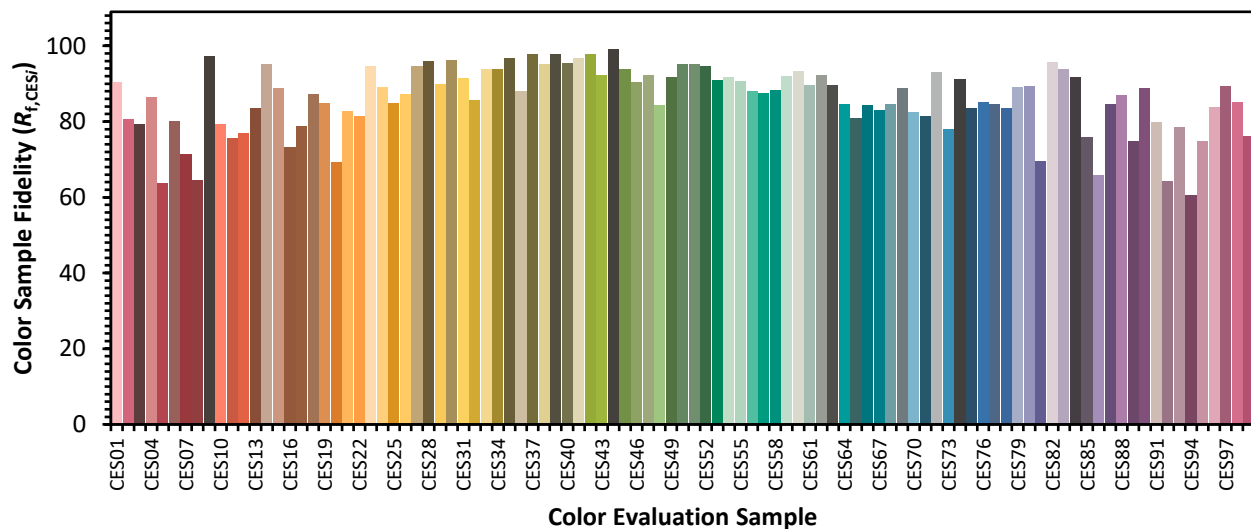


Color Vector Graphics

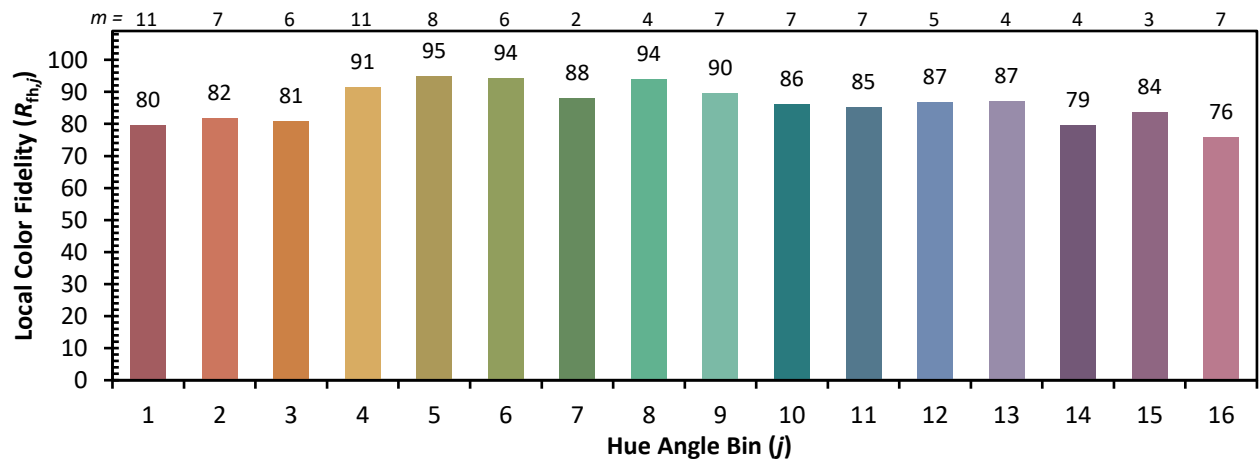
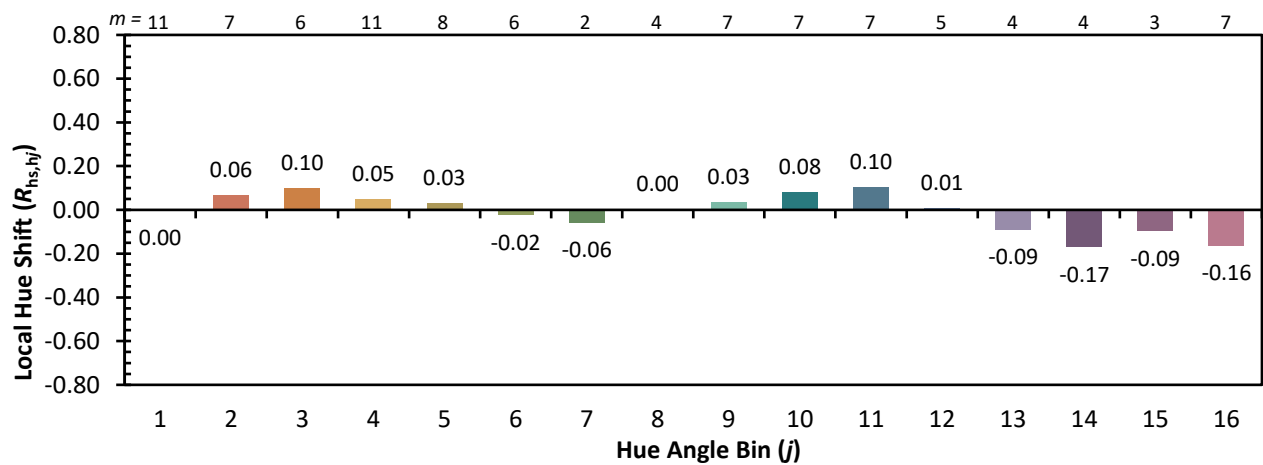
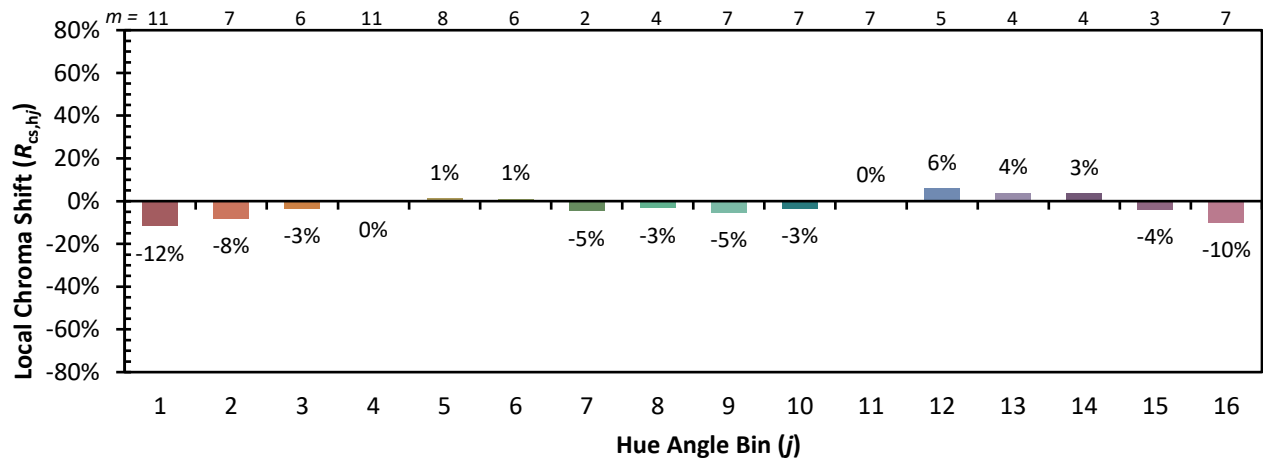


Individual Sample Fidelity Index ($R_{f,i}$)

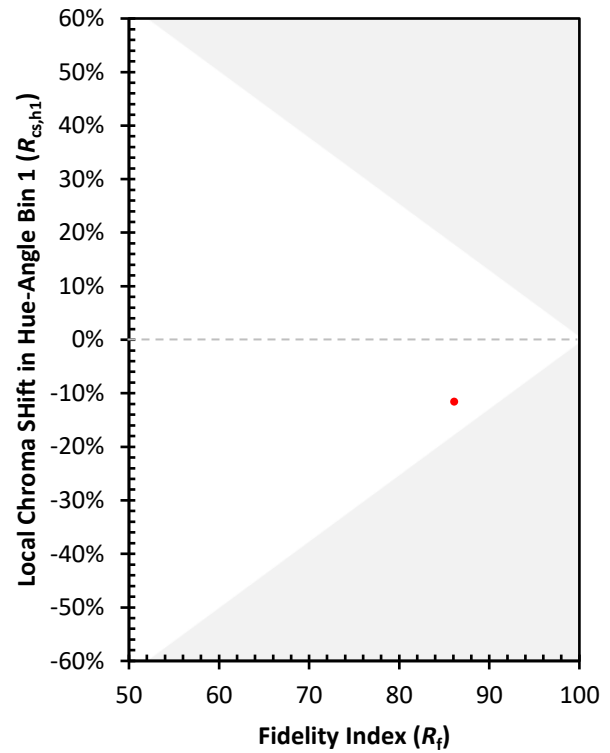
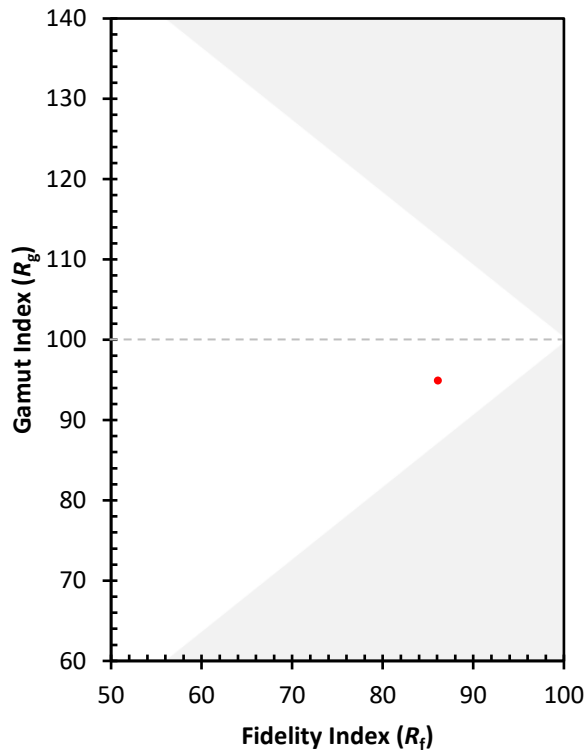
CES01 = 86	CES26 = 87	CES51 = 95	CES76 = 85
CES02 = 63	CES27 = 95	CES52 = 95	CES77 = 85
CES03 = 31	CES28 = 96	CES53 = 91	CES78 = 83
CES04 = 70	CES29 = 90	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 96	CES55 = 91	CES80 = 89
CES06 = 51	CES31 = 92	CES56 = 88	CES81 = 70
CES07 = 42	CES32 = 86	CES57 = 87	CES82 = 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)