

Signify Classified - Internal
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: P832968

Luminaire Tested: **TTN-D0-830-U-RW-CG-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P832968
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-D0-830-U-RW-CG-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1736.7 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B1 - U4 - G1

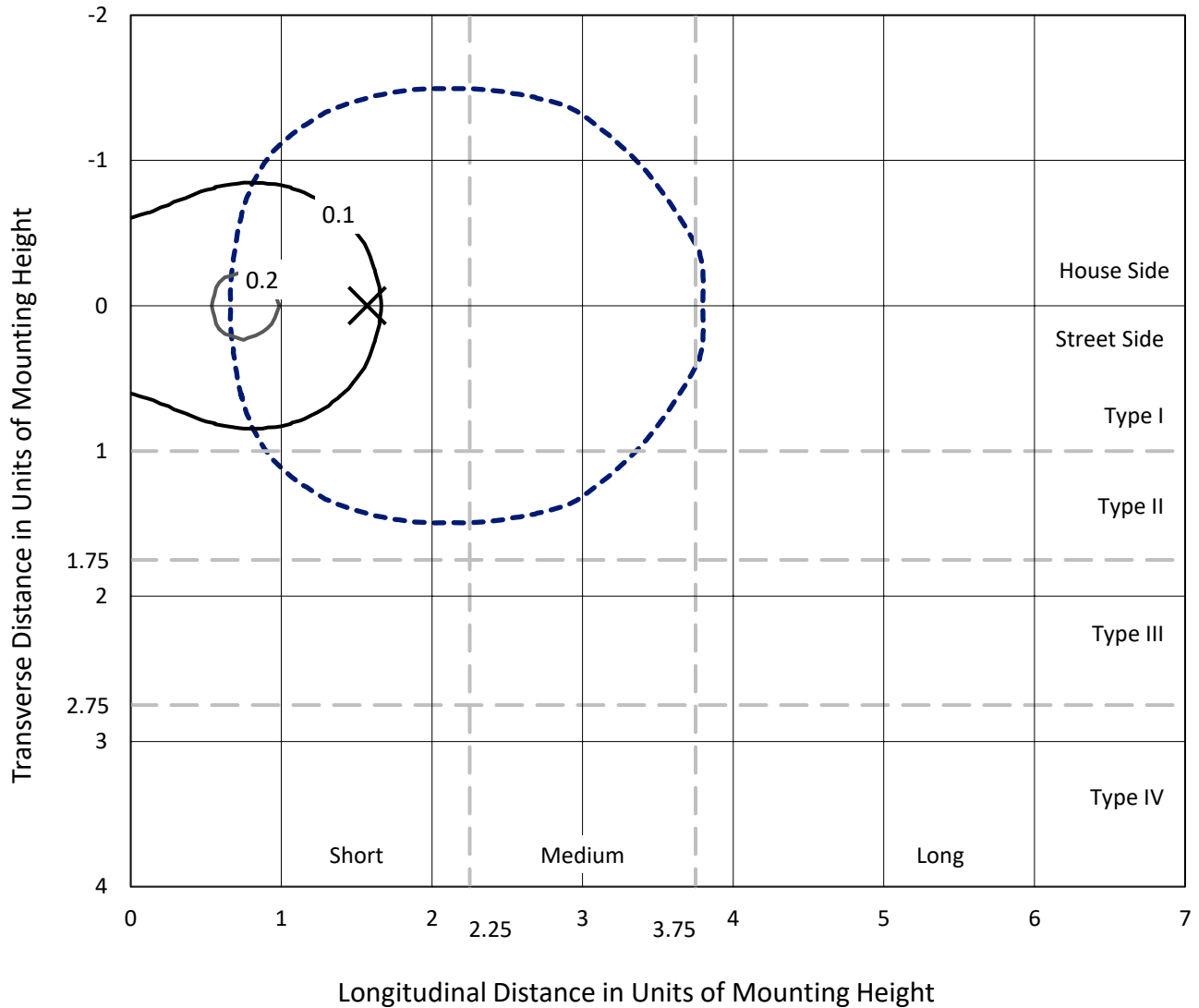
Input Watts (W): 17.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

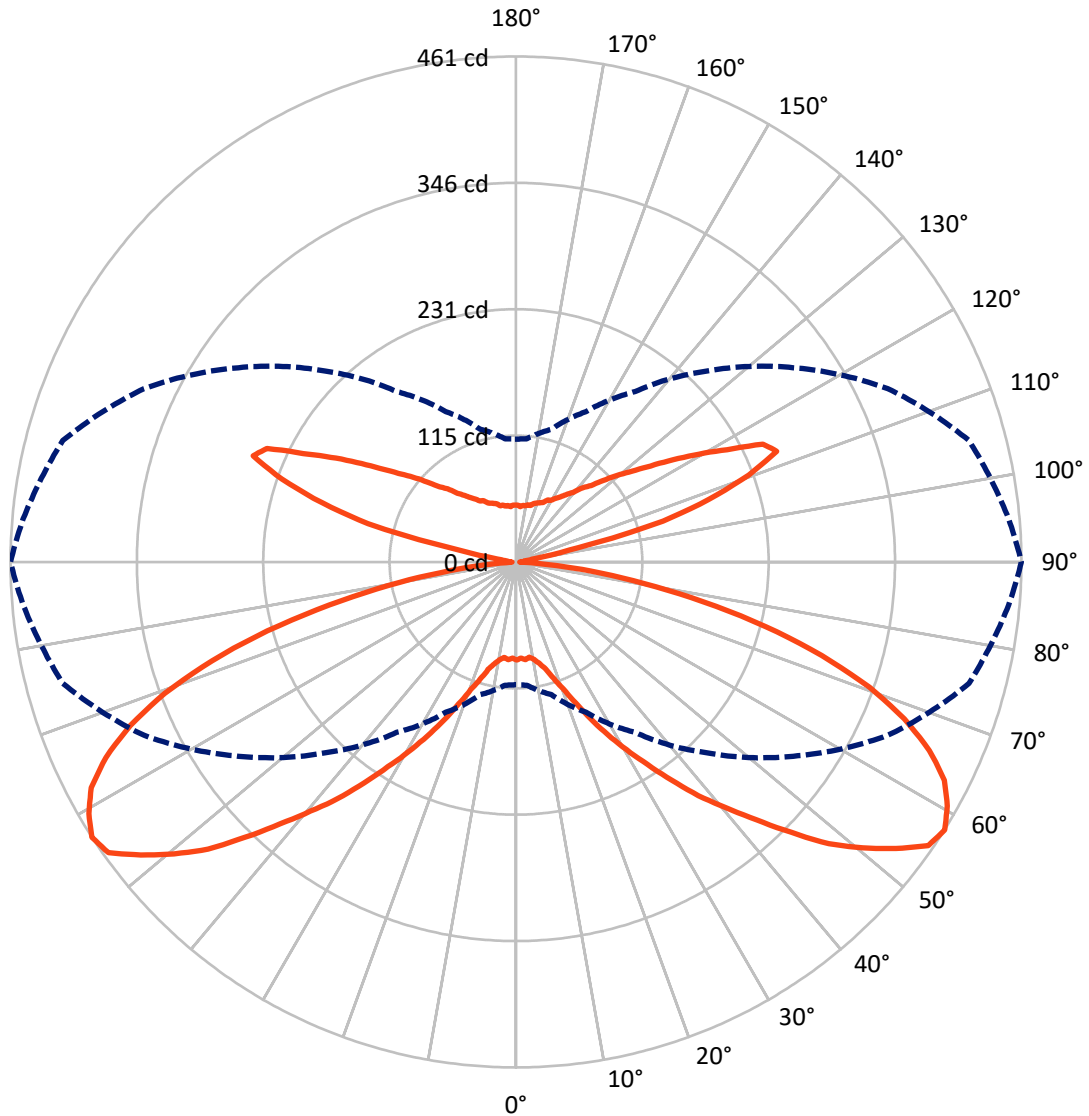
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.2 fc
 Type II - Short - N/A

REPORT NUMBER: P832968
CATALOG NUMBER: TTN-D0-830-U-RW-CG-UPL3

Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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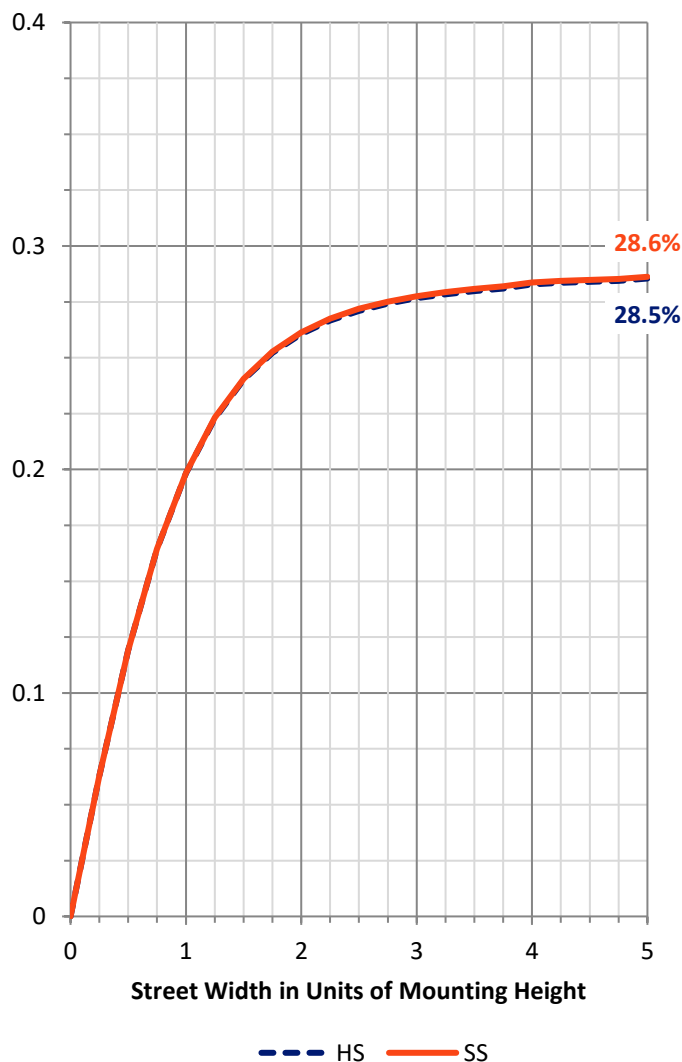
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	498.0	370.3	868.3
	% Fixture	28.7	21.3	50.0
Street Side	Lumens	498.0	370.3	868.3
	% Fixture	28.7	21.3	50.0
Total	Lumens	996.0	740.7	1736.7
	% Fixture	57.4	42.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.5	0.5
10°-20°	27.5	1.6
20°-30°	58.5	3.4
30°-40°	107.8	6.2
40°-50°	173.6	10.0
50°-60°	235.0	13.5
60°-70°	228.5	13.2
70°-80°	133.0	7.7
80°-90°	23.5	1.4
90°-100°	16.5	1.0
100°-110°	168.0	9.7
110°-120°	245.6	14.1
120°-130°	142.5	8.2
130°-140°	75.5	4.3
140°-150°	44.9	2.6
150°-160°	27.6	1.6
160°-170°	15.1	0.9
170°-180°	4.9	0.3
0°-90°	996.0	57.4
0°-180°	1736.7	100.0

Coefficient of Utilization



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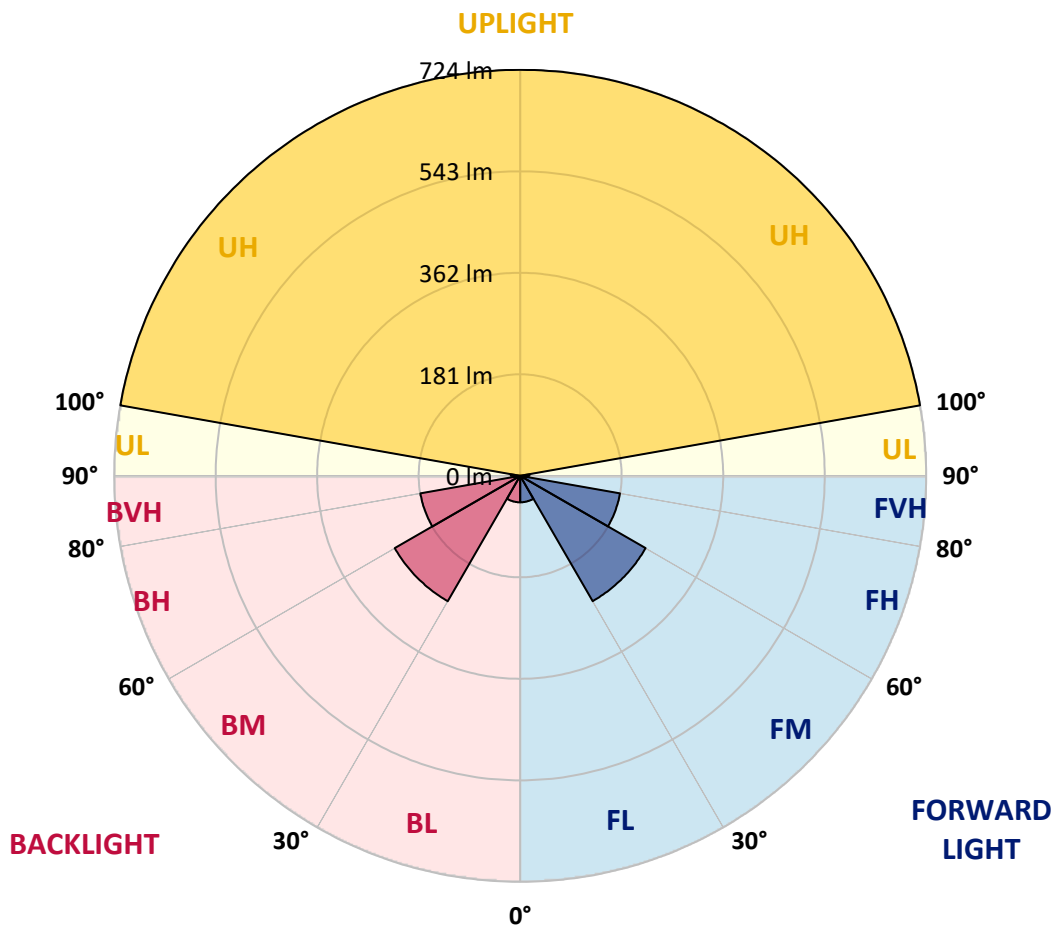
CATALOG NUMBER: TTN-D0-830-U-RW-CG-UPL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	47.3	2.7			
FM (30°-60°)	258.3	14.9			
FH (60°-80°)	180.7	10.4			G0/660
FVH (80°-90°)	11.7	0.7			G1/100
BL (0°-30°)	47.3	2.7	B0/110		
BM (30°-60°)	258.3	14.9	B1/1000		
BH (60°-80°)	180.7	10.4	B1/500		G1/500
BVH (80°-90°)	11.7	0.7			G1/100
UL (90°-100°)	16.5	1.0		U2/50	
UH (100°-180°)	724.2	41.7		U4/1000	

BUG Rating: B1-U4-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
2.5°	89.5	89.5	89.5	89.5	88.6	88.6	88.6	87.7	87.7	87.7	87.7
5°	89.5	89.5	89.5	90.4	90.4	90.4	89.5	89.5	89.5	89.5	89.5
7.5°	89.5	90.4	90.4	89.5	89.5	88.6	88.6	88.6	87.7	87.7	87.7
10°	89.5	89.5	89.5	89.5	88.6	88.6	89.5	89.5	90.4	90.4	90.4
12.5°	88.6	88.6	89.5	89.5	89.5	90.4	92.2	93.1	94.0	94.9	94.9
15°	89.5	89.5	90.4	91.3	92.2	94.0	96.7	99.4	101.2	102.1	101.2
17.5°	89.5	90.4	91.3	93.1	95.8	98.5	103.0	106.5	110.1	111.0	111.9
20°	91.3	91.3	92.2	95.8	100.3	104.7	111.0	117.3	121.8	123.5	123.5
22.5°	92.2	93.1	94.0	98.5	105.6	112.8	121.8	128.9	135.2	138.8	139.7
25°	94.9	94.9	96.7	103.0	111.9	122.6	134.3	145.0	153.1	157.6	158.5
27.5°	96.7	97.6	100.3	108.3	120.0	133.4	149.5	162.0	171.9	177.3	178.2
30°	98.5	99.4	104.7	113.7	128.0	144.1	162.9	179.0	191.6	197.8	198.7
32.5°	101.2	102.1	108.3	118.2	135.2	154.9	176.4	196.1	214.0	219.3	220.2
35°	103.8	104.7	111.9	123.5	143.2	165.6	190.7	214.0	235.4	242.6	244.4
37.5°	106.5	107.4	114.6	128.9	151.3	177.3	206.8	234.6	257.8	267.7	270.4
40°	109.2	110.1	118.2	134.3	159.4	189.8	223.8	254.2	281.1	292.7	294.5
42.5°	111.0	111.9	120.9	138.8	167.4	201.4	241.7	275.7	304.4	319.6	321.4
45°	113.7	114.6	124.4	145.0	174.6	214.9	258.7	299.9	333.0	350.0	351.8
47.5°	115.5	116.4	127.1	148.6	182.6	227.4	276.6	321.4	360.8	378.7	384.1
50°	116.4	117.3	128.9	152.2	188.0	236.3	291.0	342.9	385.0	407.3	410.0
52.5°	116.4	118.2	129.8	154.9	191.6	244.4	302.6	360.8	408.2	433.3	434.2
55°	115.5	116.4	128.9	154.0	193.4	248.0	310.6	371.5	424.3	448.5	456.6
57.5°	111.9	112.8	125.3	151.3	189.8	246.2	308.9	374.2	427.9	451.2	461.1
60°	106.5	108.3	120.0	145.0	184.4	239.9	303.5	368.8	422.6	451.2	452.1
62.5°	100.3	101.2	112.8	137.0	176.4	230.1	293.6	358.1	410.0	439.6	438.7
65°	91.3	92.2	102.1	127.1	162.0	211.3	273.9	341.1	385.9	417.2	414.5
67.5°	81.5	82.4	91.3	113.7	145.0	190.7	247.1	312.4	351.8	384.1	382.3
70°	70.7	70.7	78.8	97.6	127.1	167.4	217.5	274.8	314.2	341.1	342.0
72.5°	58.2	58.2	65.4	81.5	106.5	140.6	183.5	234.6	266.8	290.1	291.8
75°	45.7	44.8	51.0	64.5	84.2	111.9	145.0	188.9	214.0	236.3	235.4
77.5°	32.2	32.2	35.8	46.6	60.9	83.3	107.4	142.3	159.4	178.2	174.6
80°	20.6	20.6	22.4	30.4	40.3	55.5	70.7	96.7	108.3	122.6	118.2
82.5°	10.7	9.8	11.6	16.1	21.5	30.4	39.4	56.4	61.8	72.5	68.9
85°	3.6	3.6	3.6	5.4	8.1	11.6	15.2	24.2	25.1	32.2	29.5
87.5°	0.9	0.0	0.0	0.9	0.9	0.9	0.9	2.7	2.7	5.4	3.6
90°	6.3	6.3	7.6	7.6	7.6	7.6	7.6	7.6	7.6	6.3	6.3
92.5°	6.3	6.3	6.3	8.9	10.1	8.9	10.1	7.6	7.6	6.3	6.3
95°	7.6	7.6	8.9	11.4	13.9	15.2	15.2	8.9	8.9	7.6	7.6
97.5°	10.1	11.4	11.4	13.9	22.8	41.8	25.3	12.7	12.7	11.4	10.1
100°	16.5	17.7	17.7	31.7	67.2	90.0	64.6	32.9	24.1	17.7	17.7
102.5°	53.2	55.8	68.4	102.6	152.1	138.1	116.6	110.2	76.0	60.8	58.3
105°	135.6	134.3	144.5	171.1	212.9	209.1	192.6	174.9	150.8	139.4	139.4
107.5°	178.7	178.7	187.5	210.4	242.0	282.6	286.4	226.8	198.9	186.3	185.0
110°	201.5	201.5	209.1	228.1	269.9	326.9	324.4	280.0	245.8	229.4	226.8



REPORT NUMBER: P832968
 CATALOG NUMBER: TTN-D0-830-U-RW-CG-UPL3

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	206.5	207.8	218.0	247.1	292.7	318.1	306.7	288.9	273.7	261.0	258.5
115°	214.2	214.2	225.6	253.4	278.8	288.9	276.2	262.3	252.2	247.1	249.6
117.5°	211.6	215.4	218.0	233.2	249.6	257.2	250.9	231.9	224.3	221.8	218.0
120°	196.4	196.4	198.9	206.5	215.4	219.2	216.7	204.0	197.7	196.4	193.9
122.5°	174.9	176.1	174.9	178.7	185.0	188.8	186.3	176.1	173.6	173.6	171.1
125°	153.3	153.3	152.1	154.6	158.4	157.1	158.4	153.3	152.1	152.1	150.8
127.5°	138.1	136.9	134.3	135.6	136.9	136.9	138.1	133.1	134.3	135.6	134.3
130°	122.9	122.9	120.4	120.4	120.4	117.8	120.4	117.8	119.1	120.4	121.6
132.5°	109.0	109.0	105.2	103.9	103.9	103.9	105.2	103.9	106.4	109.0	109.0
135°	97.6	97.6	93.8	95.0	95.0	93.8	95.0	93.8	96.3	97.6	97.6
137.5°	88.7	88.7	86.2	86.2	86.2	84.9	86.2	86.2	87.4	90.0	91.2
140°	81.1	81.1	79.8	79.8	78.6	79.8	79.8	79.8	81.1	82.4	82.4
142.5°	77.3	76.0	74.8	73.5	74.8	74.8	74.8	73.5	74.8	77.3	77.3
145°	71.0	71.0	69.7	69.7	69.7	71.0	69.7	69.7	71.0	71.0	72.2
147.5°	67.2	67.2	65.9	67.2	67.2	67.2	67.2	65.9	67.2	67.2	68.4
150°	65.9	64.6	63.4	64.6	64.6	63.4	63.4	63.4	63.4	64.6	64.6
152.5°	62.1	62.1	60.8	62.1	60.8	60.8	60.8	60.8	60.8	62.1	63.4
155°	59.6	59.6	58.3	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
157.5°	57.0	58.3	57.0	57.0	57.0	57.0	57.0	57.0	57.0	58.3	58.3
160°	55.8	55.8	55.8	55.8	54.5	54.5	54.5	55.8	55.8	55.8	57.0
162.5°	54.5	54.5	54.5	54.5	53.2	53.2	53.2	53.2	54.5	54.5	55.8
165°	54.5	53.2	53.2	53.2	52.0	52.0	52.0	52.0	53.2	54.5	53.2
167.5°	52.0	52.0	52.0	52.0	52.0	50.7	50.7	52.0	52.0	52.0	53.2
170°	52.0	52.0	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	52.0
172.5°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	50.7	50.7	52.0	52.0
175°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	52.0	52.0	52.0	50.7
177.5°	52.0	52.0	52.0	52.0	50.7	52.0	52.0	52.0	52.0	52.0	52.0
180°	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0

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



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 TT and TTN families of products

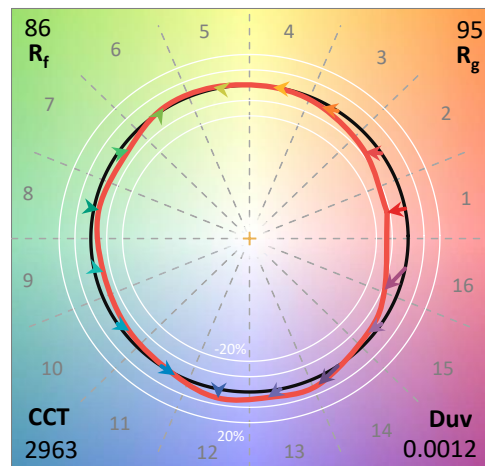
Test Information

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



Test Conditions

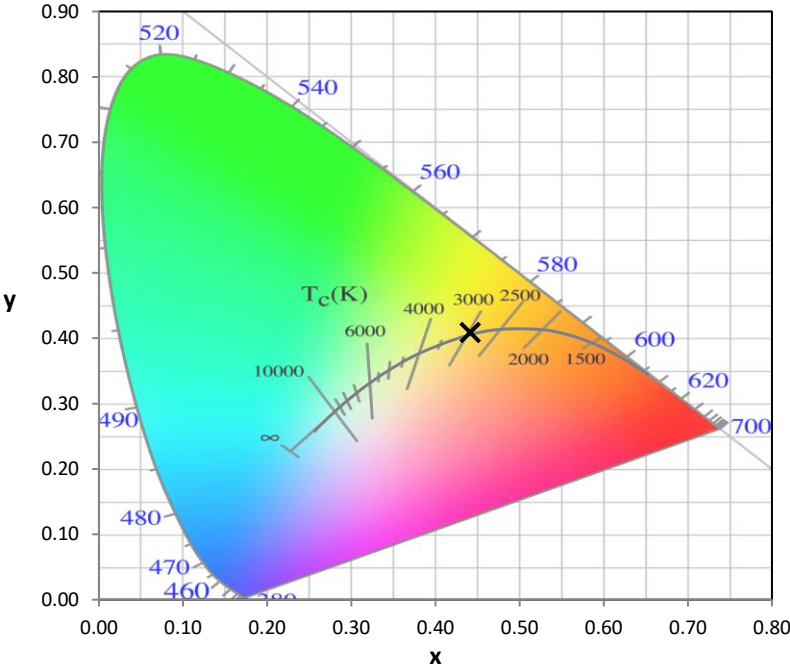
Stabilization Time: 37M
 Operation Time: 1H 37M
 Sphere Temperature (°C): 25.0

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

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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			

REPORT NUMBER: SP1-2411-284-4

Scotopic Flux vs. Wavelength



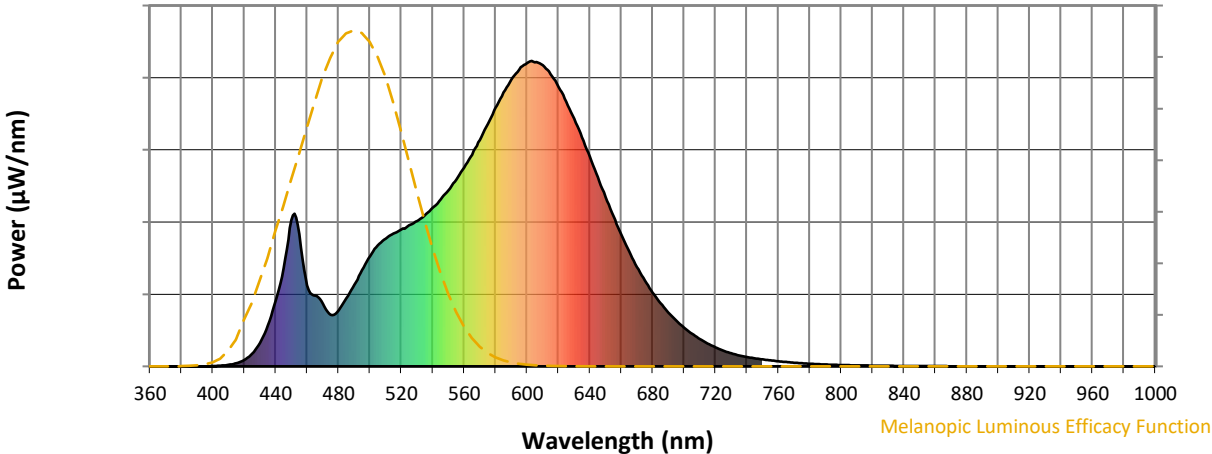
Scotopic Lumens: NR

S/P: 1.34

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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Melanopic Flux vs. Wavelength

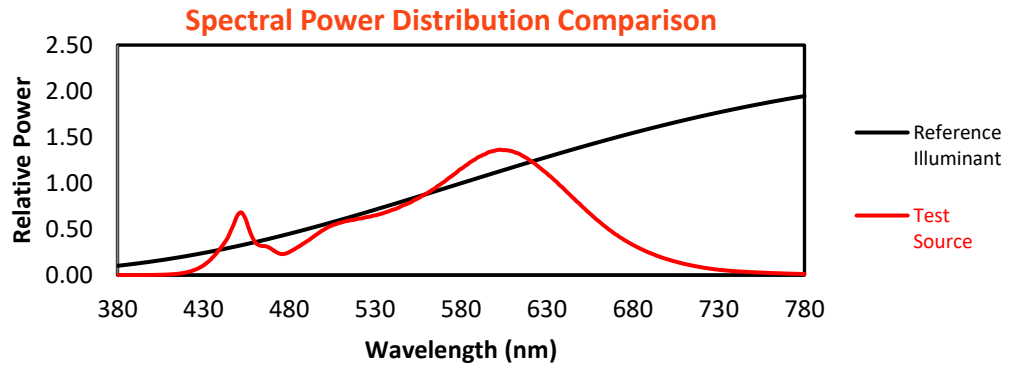


Melanopic Lumens: NR M/P: 2.58

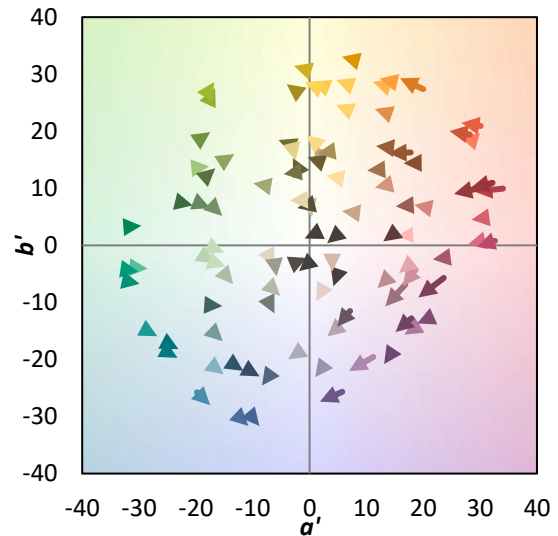
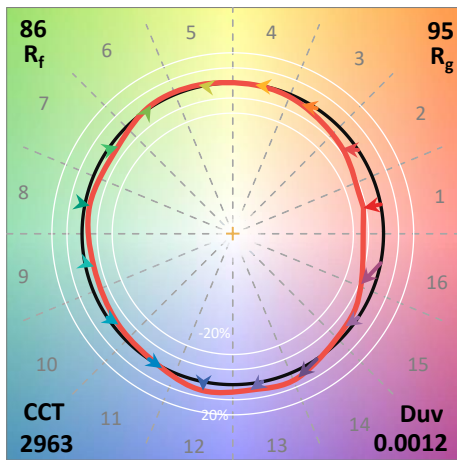
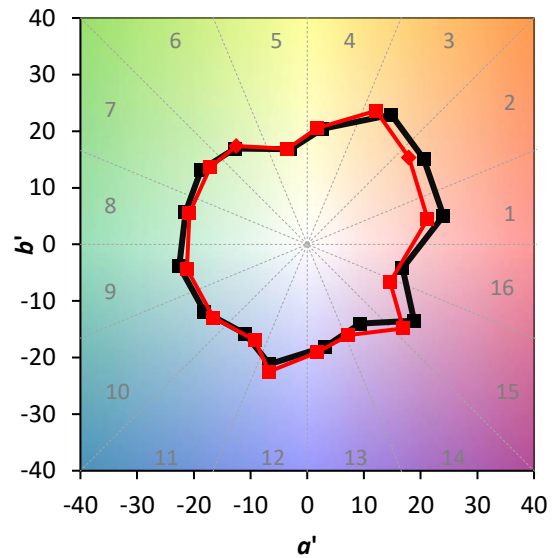
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	267	NR	620	915	NR	750	23	NR	880	0	NR
365	0	NR	495	315	NR	625	866	NR	755	20	NR	885	0	NR
370	0	NR	500	360	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			

Summary

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

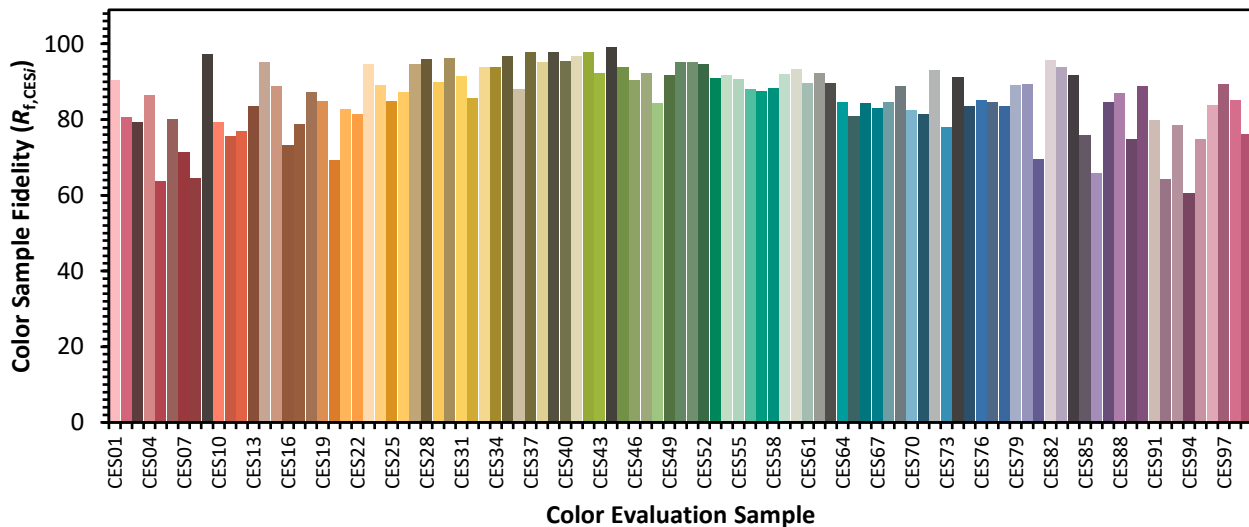


Color Vector Graphics

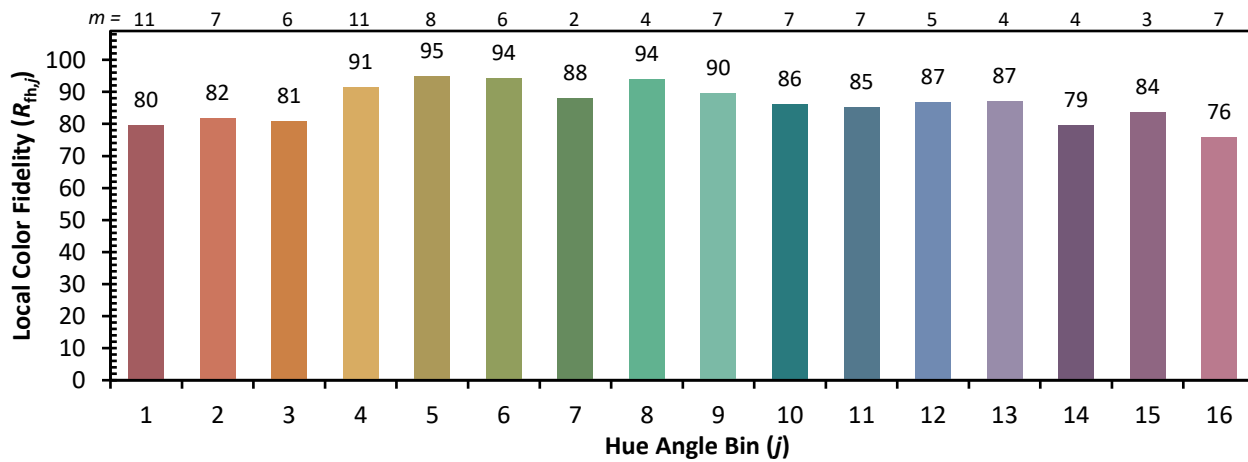
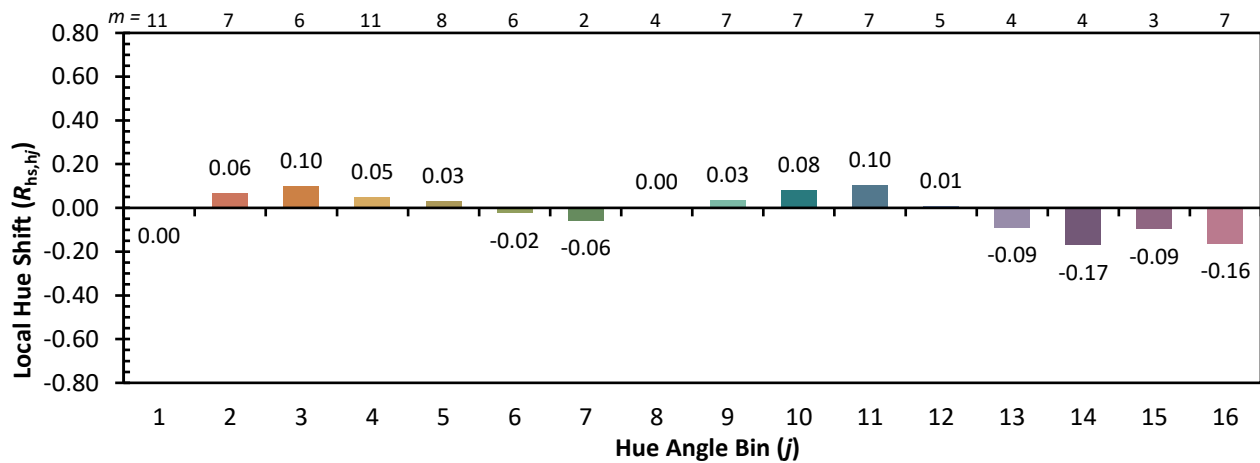


Individual Sample Fidelity Index ($R_{f,i}$)

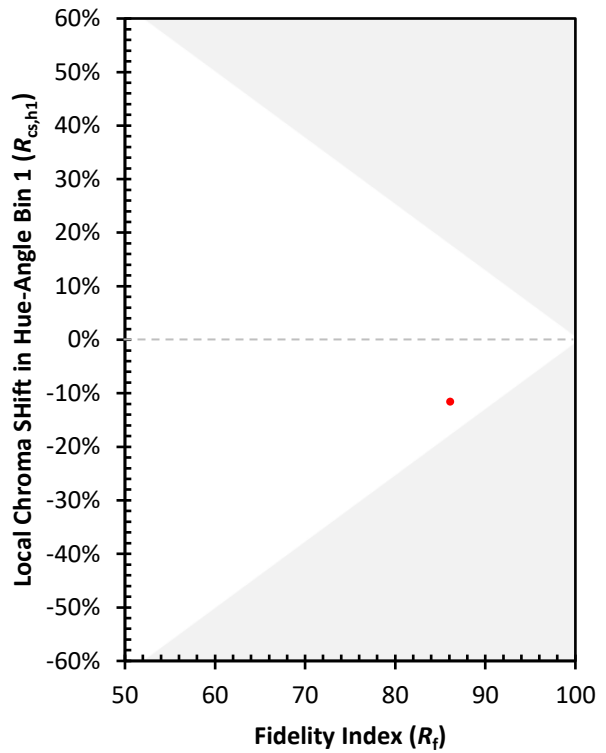
CES01 = 86	CES26 = 87	CES51 = 95	CES76 = 85
CES02 = 63	CES27 = 95	CES52 = 95	CES77 = 85
CES03 = 31	CES28 = 96	CES53 = 91	CES78 = 83
CES04 = 70	CES29 = 90	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 96	CES55 = 91	CES80 = 89
CES06 = 51	CES31 = 92	CES56 = 88	CES81 = 70
CES07 = 42	CES32 = 86	CES57 = 87	CES82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