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

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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: P1445254

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

Issue Date: 05/21/2026

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

Scaled Data Report

Test Information

Test Method:	LM-79-2024
Report Number:	P1445254
Test Lab:	INNOVATION CENTER(G1)
Issue Date:	5/21/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	TPTN-VA1-830-U-DL-CG-GM
Description:	TOPTIER NANO SPIDER MOUNT VISUAL COMFORT LED LUMINAIRE 27W 80CRI 3000K w/ DRIVE LANE TYPE IV DISTRIBUTION OPTIC AND GLASS
Light Source:	3000K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2056.9 lumens
Efficiency:	N/A
Efficacy:	77.0 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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REPORT NUMBER: P1445254
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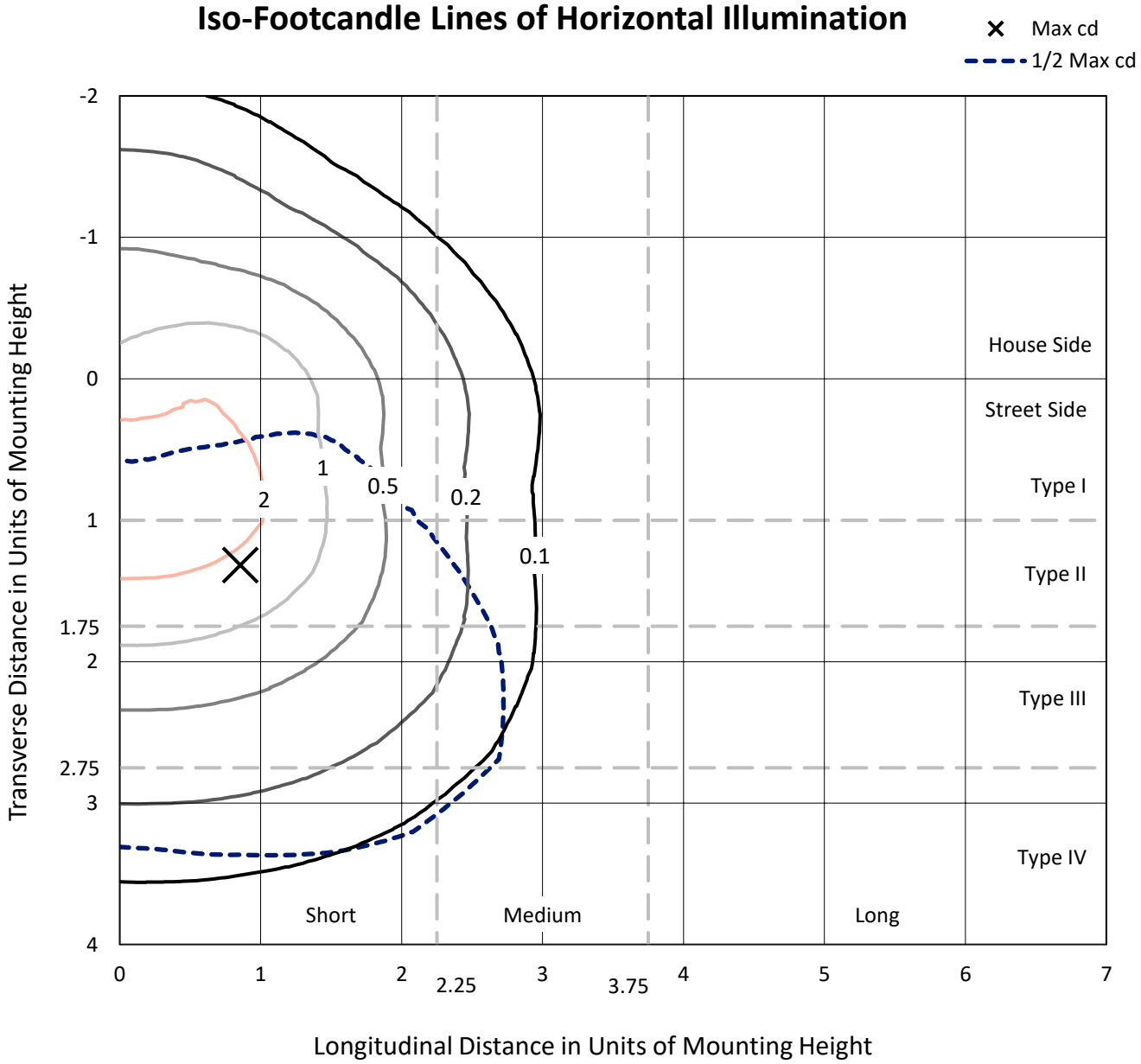
Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 3.7 fc
Type IV - Short - N/A

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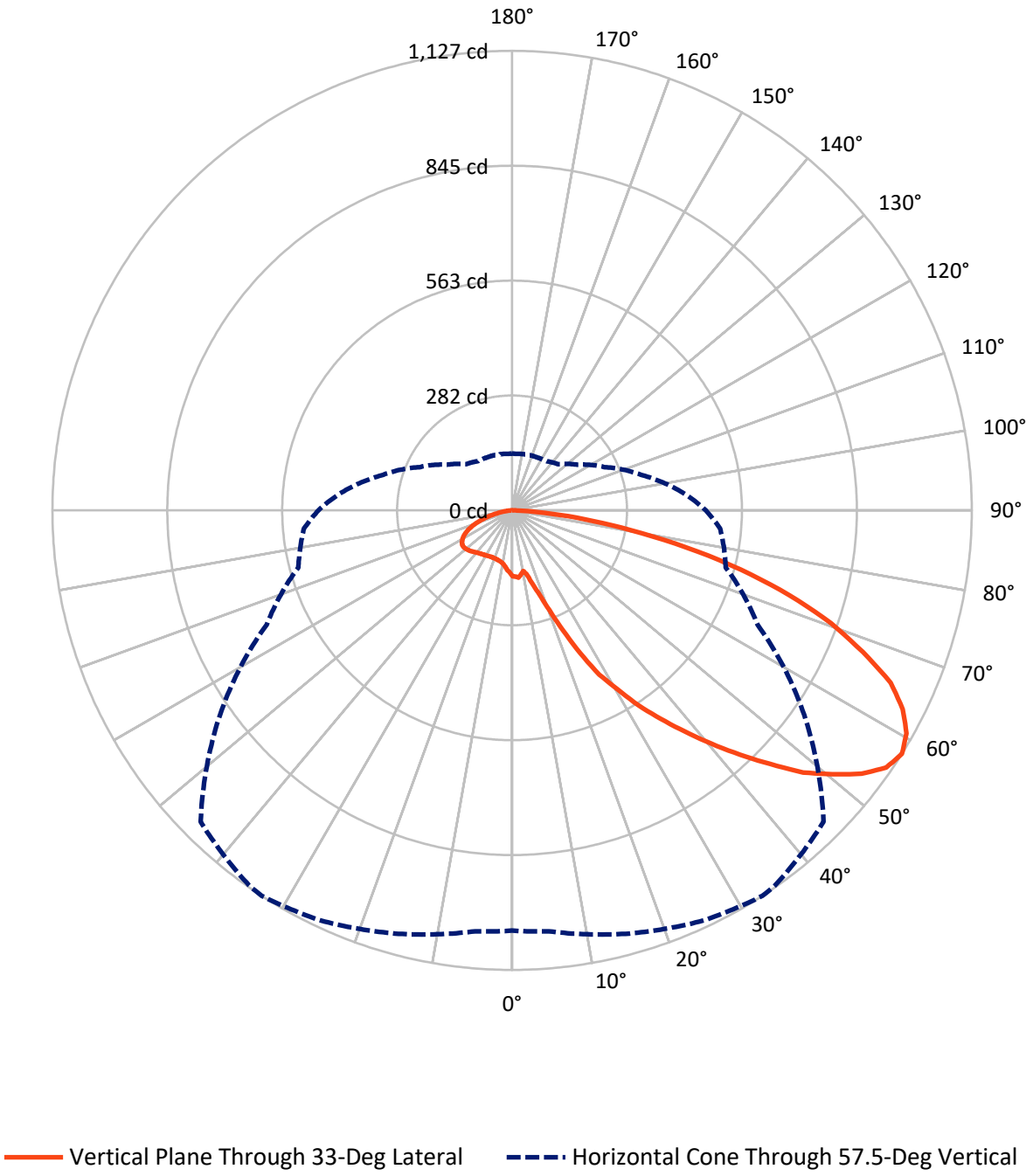
Luminous Intensity Polar Plot



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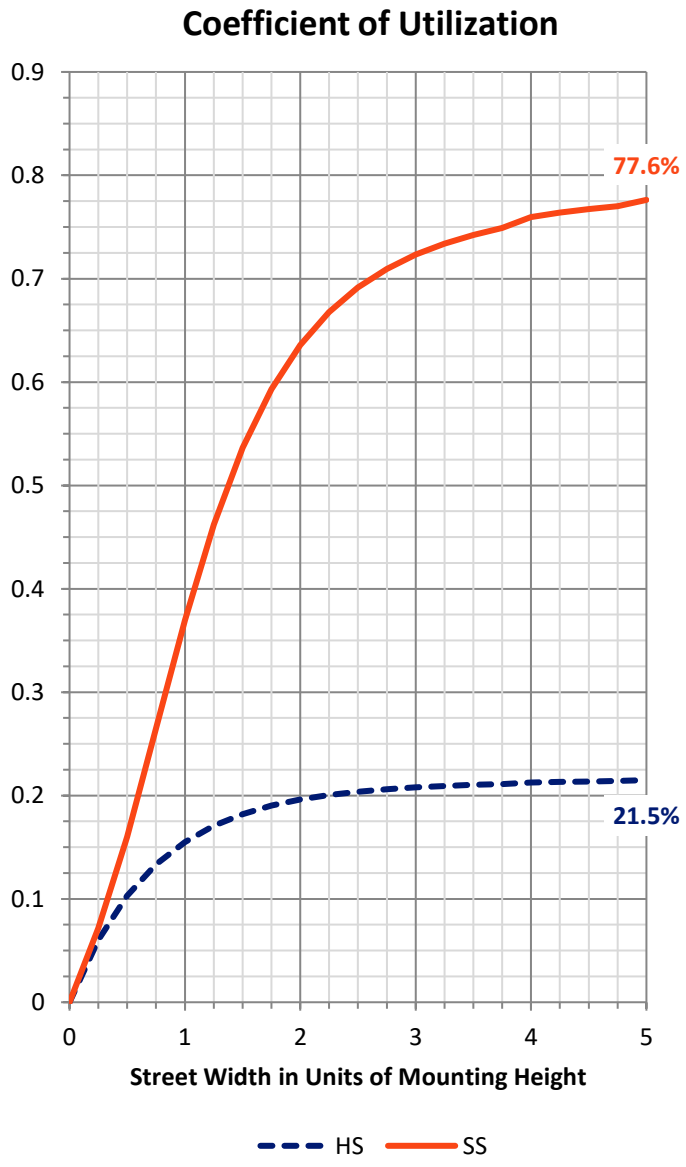
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	445.4	0.0	445.4
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	1611.5	0.0	1611.5
	% Fixture	78.3	0.0	78.3
Total	Lumens	2056.9	0.0	2056.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.6	0.7
10°-20°	46.4	2.3
20°-30°	114.6	5.6
30°-40°	222.5	10.8
40°-50°	361.6	17.6
50°-60°	488.9	23.8
60°-70°	476.0	23.1
70°-80°	280.6	13.6
80°-90°	51.7	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°	2056.9	100.0
0°-180°	2056.9	100.0



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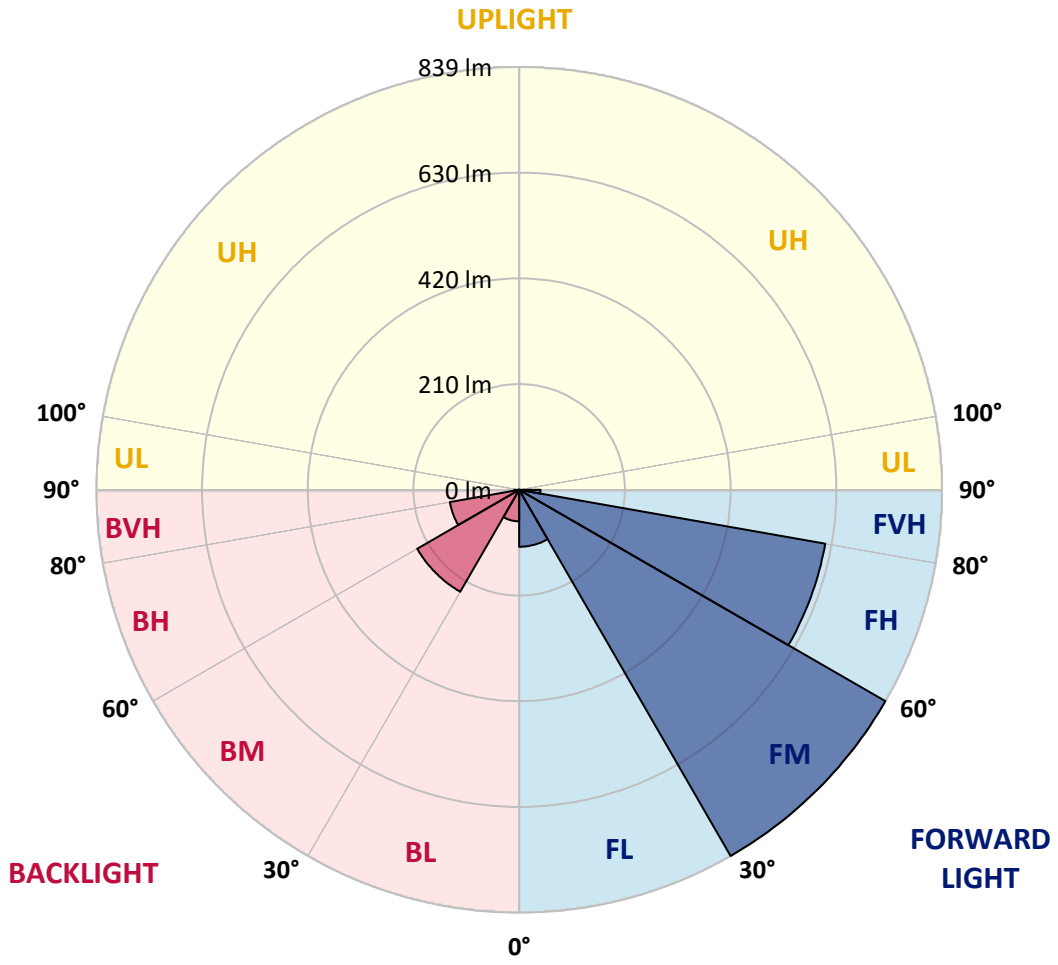
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	113.1	5.5			
FM	(30°-60°)	839.3	40.8			
FH	(60°-80°)	616.9	30.0			G0/660
FVH	(80°-90°)	42.2	2.1			G1/100
BL	(0°-30°)	62.6	3.0	B0/110		
BM	(30°-60°)	233.7	11.4	B1/1000		
BH	(60°-80°)	139.7	6.8	B1/500		G1/500
BVH	(80°-90°)	9.4	0.5			G0/10
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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	161.6	161.6	161.6	161.6	*161.6*	161.6	161.6	161.6	161.6	161.6	161.6
2.5°	163.6	163.2	163.2	162.8	*162.4*	162.4	162.0	161.6	160.7	159.9	159.1
5°	171.4	170.5	168.9	167.3	*165.6*	165.6	164.8	164.4	163.6	163.2	162.4
7.5°	163.6	163.6	162.8	160.7	*158.3*	157.9	154.2	153.0	154.2	153.8	154.2
10°	167.3	166.9	162.4	157.1	*150.9*	149.7	146.4	145.2	147.6	150.1	152.1
12.5°	180.0	180.0	175.0	168.1	*161.6*	159.9	153.0	150.5	150.9	153.8	156.2
15°	200.8	200.8	197.1	191.4	*185.3*	182.0	171.4	164.4	162.4	163.6	166.1
17.5°	232.7	231.1	233.1	224.9	*216.8*	213.9	197.1	184.5	179.1	179.5	180.4
20°	281.8	281.0	281.0	275.7	*261.3*	255.6	233.1	210.6	201.2	200.0	199.2
22.5°	344.4	342.3	343.1	336.6	*319.0*	314.1	279.3	247.8	228.6	222.9	222.5
25°	416.4	416.8	417.6	408.6	*387.7*	383.2	337.0	291.2	260.9	249.9	247.0
27.5°	489.2	489.2	484.2	471.2	*456.0*	448.3	397.9	339.1	296.9	280.6	272.8
30°	554.6	554.2	543.5	524.3	*508.8*	503.5	447.8	384.0	331.3	306.7	296.9
32.5°	618.0	616.8	597.9	581.2	*570.1*	562.0	501.8	427.4	364.4	331.7	319.4
35°	682.6	675.2	653.6	639.7	*627.8*	618.4	558.7	471.6	397.1	358.3	342.7
37.5°	739.5	737.4	712.1	701.4	*687.9*	683.0	619.6	517.0	431.9	384.9	368.1
40°	795.1	794.3	774.2	763.6	*751.7*	744.8	684.2	566.5	469.9	413.9	395.1
42.5°	845.0	846.6	836.0	829.0	*818.8*	813.5	750.1	618.4	506.7	441.3	421.3
45°	901.0	901.4	899.4	896.5	*887.1*	887.5	820.8	673.6	548.0	471.2	448.7
47.5°	952.5	955.8	960.7	961.1	*960.3*	956.2	896.1	726.4	586.9	498.2	474.4
50°	989.3	994.7	1012.7	1018.4	*1016.8*	1015.5	956.2	779.9	618.0	521.9	492.4
52.5°	1024.5	1028.6	1054.8	1073.2	*1072.8*	1069.9	1013.1	826.6	648.3	538.6	509.2
55°	1041.7	1044.2	1078.1	1107.5	*1112.9*	1113.3	1064.6	860.5	665.4	549.3	517.8
57.5°	*1030.2*	*1036.0*	*1074.8*	*1109.6*	*1126.8*	*1123.1*	*1079.7*	*874.0*	*663.8*	*542.3*	*512.1*
60°	1003.7	1011.8	1049.1	1088.7	*1110.8*	1105.5	1065.0	868.7	649.1	524.7	499.4
62.5°	963.2	973.4	1009.8	1048.2	*1074.4*	1076.1	1038.0	852.7	621.7	503.1	479.3
65°	885.5	899.0	952.9	995.1	*1020.0*	1026.2	984.8	814.7	586.1	470.3	442.1
67.5°	800.4	809.4	852.7	914.5	*927.6*	936.2	912.0	751.7	539.9	418.8	396.7
70°	703.5	717.4	751.7	812.3	*829.4*	835.6	821.3	674.0	473.6	362.0	349.7
72.5°	595.1	600.8	639.7	685.1	*711.2*	719.0	703.9	584.4	400.8	301.8	292.4
75°	466.7	475.7	505.5	550.5	*579.1*	577.1	574.6	478.5	317.4	240.5	231.1
77.5°	346.4	351.3	380.4	413.1	*436.4*	438.4	437.6	364.8	238.0	175.0	168.5
80°	226.2	232.3	253.6	279.3	*294.9*	301.8	299.4	254.4	163.2	117.8	112.9
82.5°	128.0	129.7	145.6	159.5	*178.7*	177.5	182.4	155.0	99.4	69.1	63.0
85°	45.4	48.3	56.4	71.2	*78.9*	84.3	85.1	72.8	44.6	31.1	23.3
87.5°	4.5	4.5	7.8	11.5	*14.7*	15.5	16.0	16.4	13.1	10.2	3.3
90°	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report

REPORT NUMBER: P1445254
CATALOG NUMBER: TPTN-VA1-830-U-DL-CG-GM

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6
2.5°	159.1	158.3	156.6	155.0	154.6	153.0	152.6	152.1	151.3	151.3	150.9
5°	160.7	159.9	157.5	154.6	151.7	149.3	147.2	145.2	143.6	142.3	142.3
7.5°	155.0	155.4	155.4	153.4	149.3	144.8	139.5	135.4	131.7	130.1	129.2
10°	152.6	153.8	153.4	151.3	147.2	141.1	134.1	127.6	122.3	119.0	118.6
12.5°	157.1	157.1	155.8	152.6	146.8	139.1	130.9	122.3	116.2	112.5	112.1
15°	166.9	166.5	162.0	155.8	147.6	138.6	129.2	119.8	112.1	108.0	107.6
17.5°	180.8	178.7	171.4	160.7	149.7	138.6	128.0	117.8	109.6	104.7	103.9
20°	198.0	193.9	182.4	166.9	152.1	139.5	127.2	116.2	108.0	102.7	102.2
22.5°	219.2	212.7	194.7	173.8	156.2	141.1	127.2	115.3	107.6	103.5	103.5
25°	240.5	231.5	208.6	181.6	160.3	142.3	127.2	116.2	109.6	106.7	106.3
27.5°	263.8	251.1	222.1	190.6	164.4	144.0	128.0	116.6	111.7	109.6	109.6
30°	285.1	270.8	236.0	199.2	168.9	146.0	129.7	117.8	112.9	112.1	111.2
32.5°	305.1	288.3	249.1	207.4	174.2	148.1	130.9	119.0	114.5	113.7	113.3
35°	327.2	308.8	260.9	215.1	178.3	151.3	132.5	121.1	116.6	115.7	115.7
37.5°	350.9	328.0	274.8	223.3	182.4	154.6	134.1	123.9	119.4	118.6	118.2
40°	373.8	348.5	288.7	231.5	187.3	157.1	136.2	126.4	122.7	121.9	121.5
42.5°	398.4	369.3	302.2	238.9	192.2	159.5	139.1	130.1	126.8	125.2	124.7
45°	420.9	389.4	314.5	246.6	196.7	162.4	142.3	134.6	131.3	129.7	129.2
47.5°	442.5	406.5	326.0	252.3	200.4	164.4	145.6	138.2	135.8	134.1	133.3
50°	460.1	420.4	334.1	256.0	202.9	165.6	148.1	141.5	139.5	137.0	136.6
52.5°	472.8	431.5	339.9	258.9	203.3	165.6	149.7	145.2	142.7	140.3	139.5
55°	478.9	435.6	339.5	257.7	200.8	164.4	149.7	146.0	144.0	141.1	140.7
57.5°	*474.8*	*429.8*	*331.7*	*250.7*	*195.1*	*159.9*	*147.2*	*143.6*	*141.5*	*139.1*	*139.1*
60°	462.2	418.0	319.4	240.1	186.1	152.6	141.9	139.1	137.0	135.0	135.0
62.5°	442.1	400.8	303.9	224.1	175.0	144.0	135.0	132.5	131.3	129.2	128.8
65°	407.4	367.3	281.8	207.4	160.3	132.9	125.2	124.3	122.7	119.8	119.4
67.5°	367.3	330.5	249.5	186.5	143.1	119.0	113.3	112.5	110.8	108.4	108.8
70°	322.3	289.6	215.9	160.7	122.3	103.9	99.0	97.7	96.5	96.1	95.7
72.5°	271.6	243.8	180.8	131.3	102.2	87.5	83.4	82.6	81.8	81.4	81.0
75°	211.0	192.2	144.4	103.5	81.0	70.3	66.7	66.3	66.3	65.4	64.6
77.5°	155.4	139.9	105.1	75.3	58.5	51.1	49.9	49.9	50.3	49.9	48.7
80°	103.1	93.2	68.7	49.9	38.9	33.9	33.9	34.4	34.8	34.4	34.8
82.5°	54.8	51.5	38.9	29.0	22.9	20.0	20.4	20.9	21.7	20.9	21.7
85°	20.0	20.4	17.2	13.1	11.0	10.2	10.6	11.0	11.5	11.0	11.0
87.5°	1.2	4.1	7.0	6.1	5.3	5.3	5.3	5.3	5.3	4.9	4.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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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

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

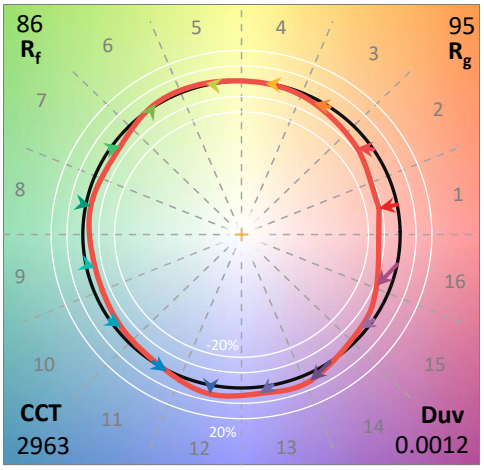
Test Information

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
Rf:	86.1
Rg:	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



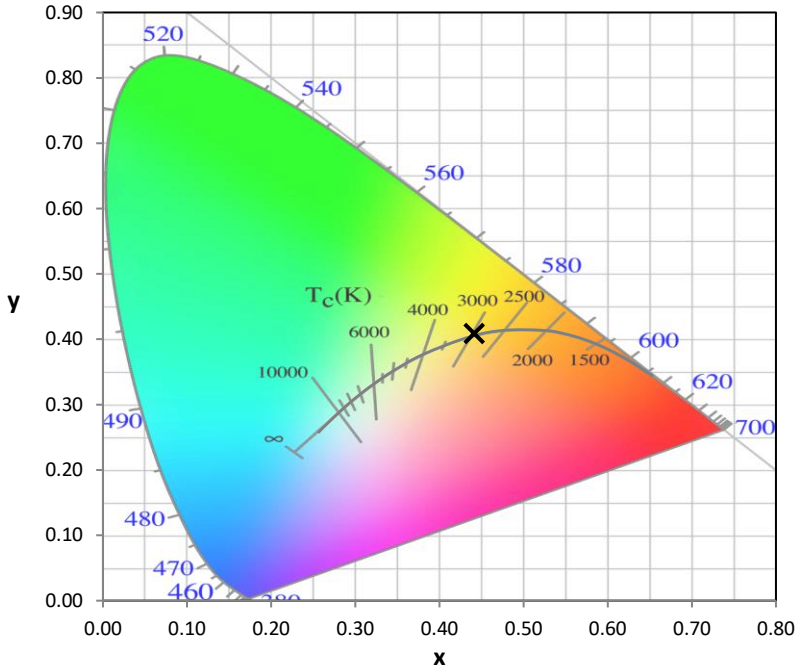
Test Conditions

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

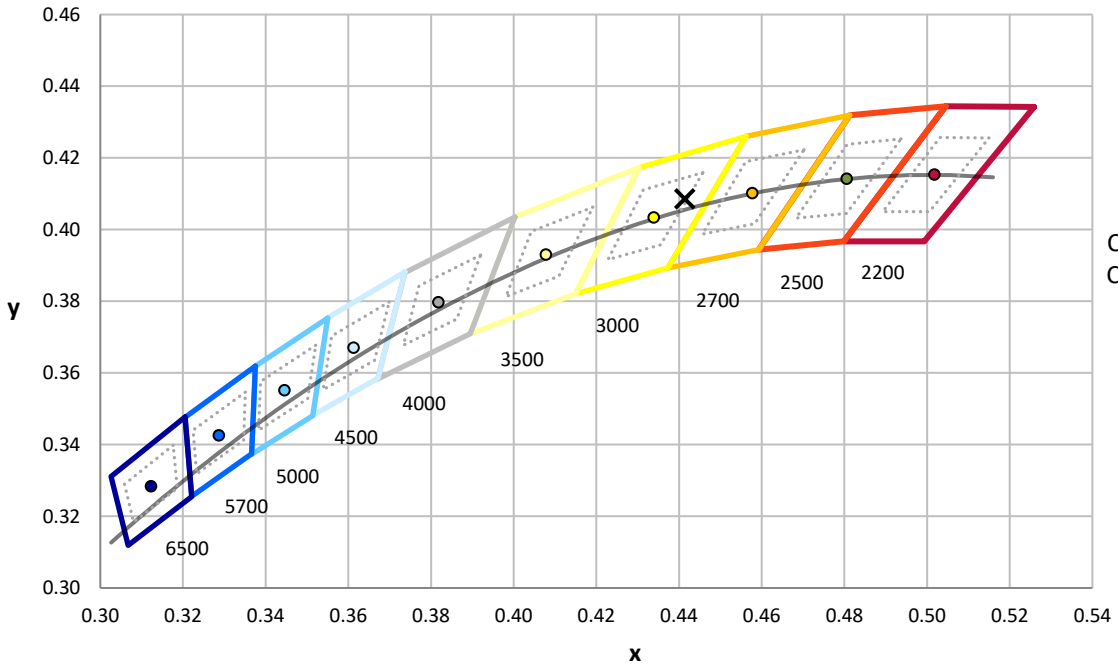
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

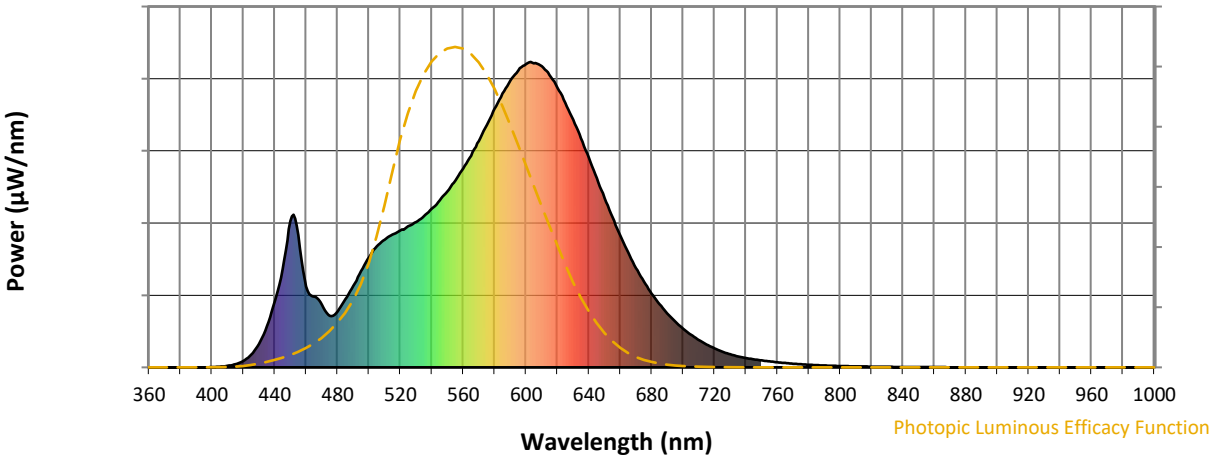


CCT = 2963K
CIE x = 0.4414
CIE y = 0.4086
Duv = 0.0012

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2411-284-4

Photopic Flux vs. Wavelength

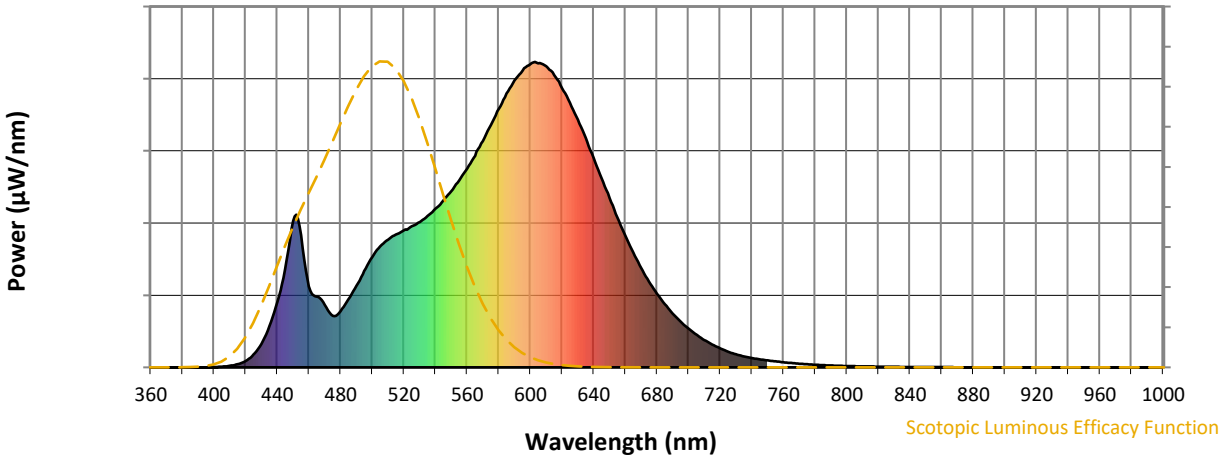


Photopic Lumens: NR

λ (nm)	Power 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

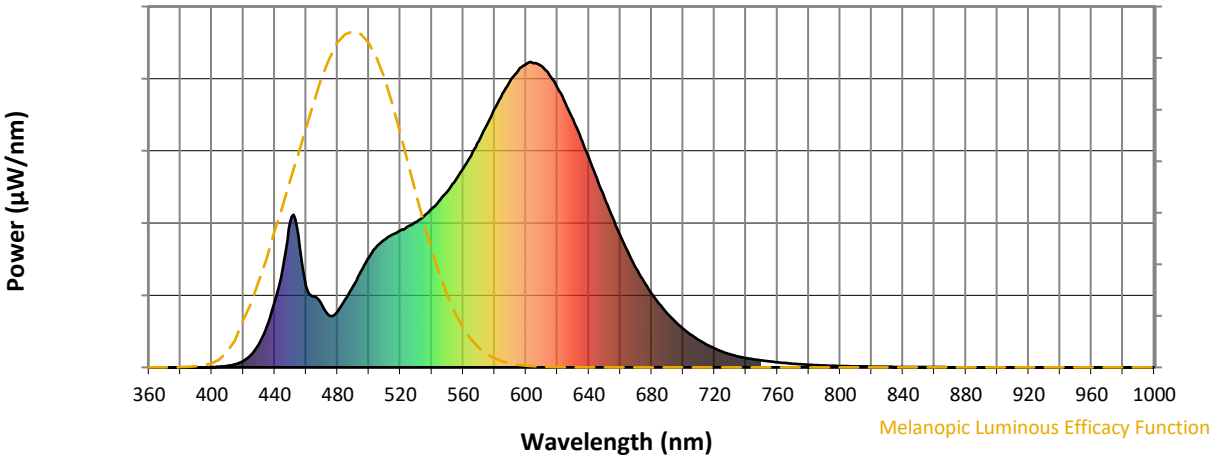


Scotopic Lumens: NR **S/P: 1.34**

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			

REPORT NUMBER: SP1-2411-284-4

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			

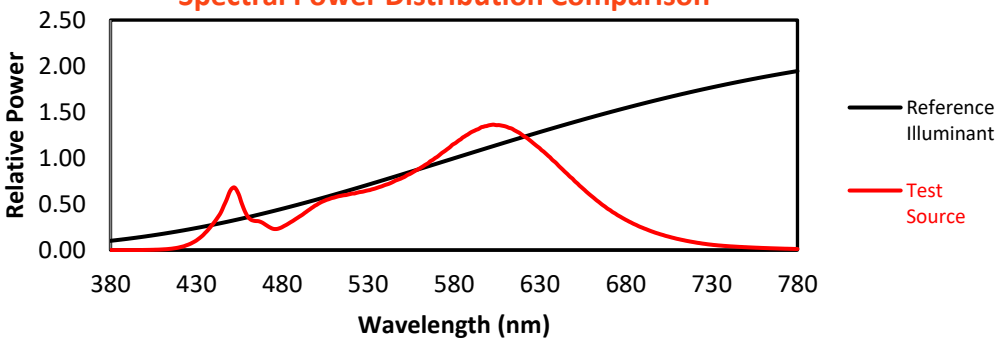
REPORT NUMBER: SP1-2411-284-4

TM-30-18

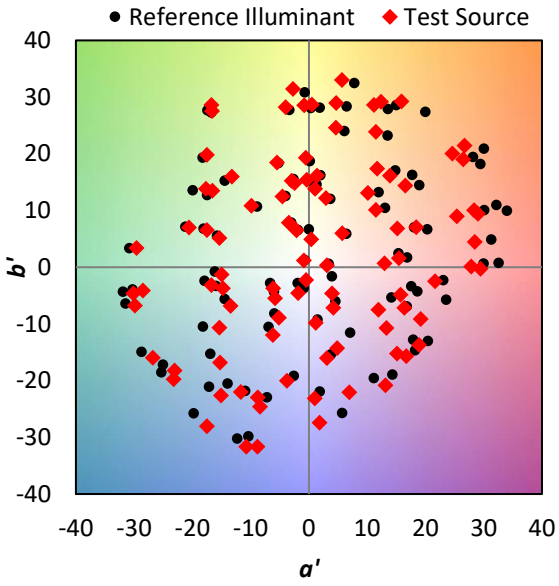
Summary

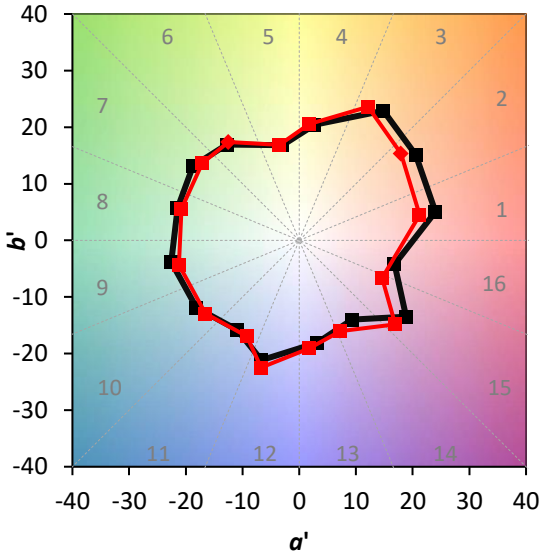
R_f = 86.1
R_g = 94.9
CIE R_a = 82.9
R_9 = 3.9

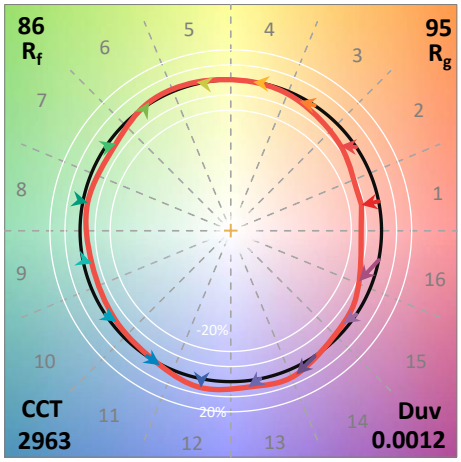
Spectral Power Distribution Comparison

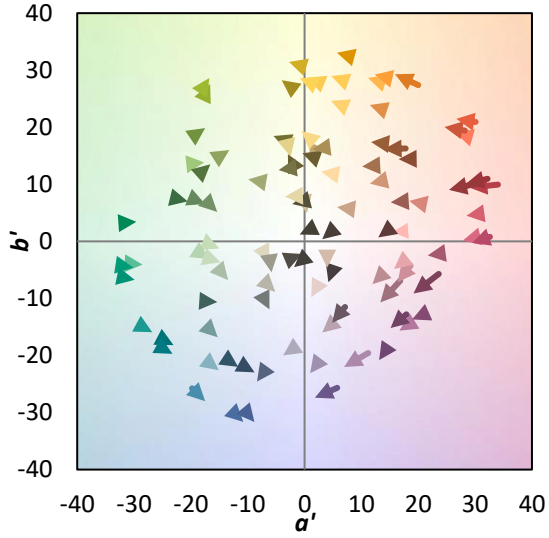


Color Vector Graphics







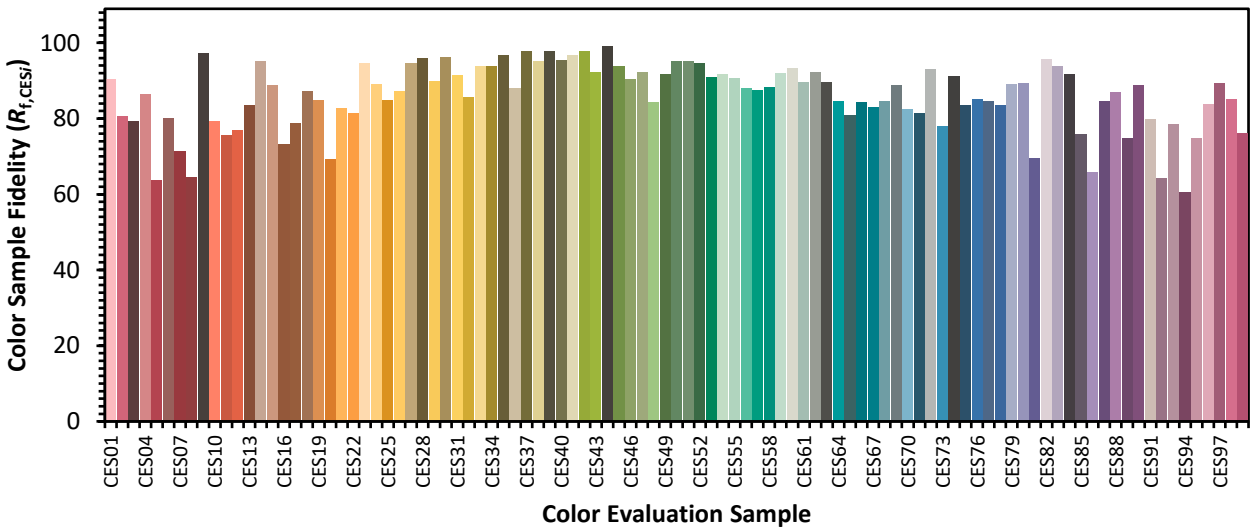


REPORT NUMBER: SP1-2411-284-4

TM-30-18

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

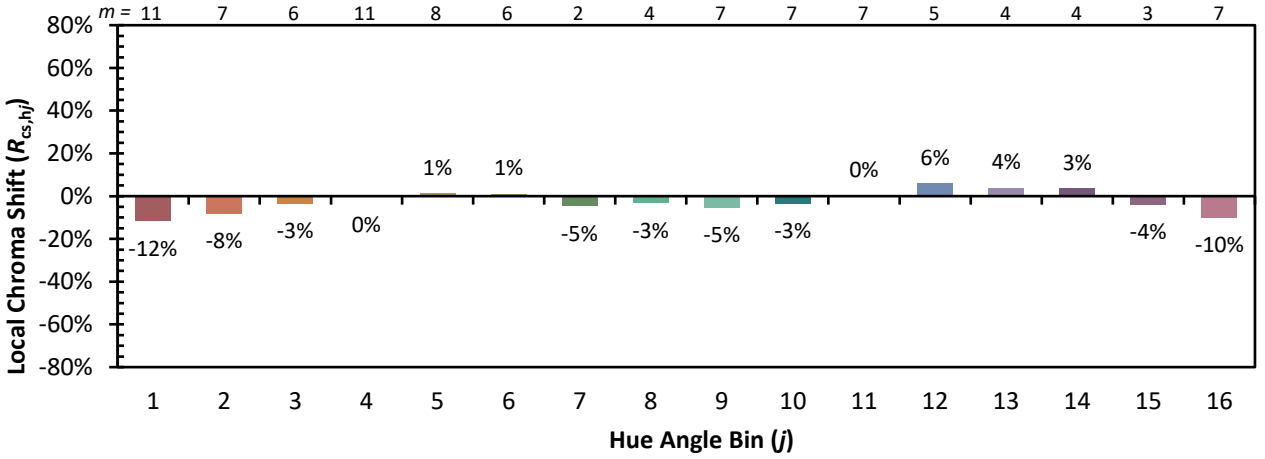
CES01 = 86	CES26 = 87	CES51 = 95	CES76 = 85
CES02 = 63	CES27 = 95	CES52 = 95	CES77 = 85
CES03 = 31	CES28 = 96	CES53 = 91	CES78 = 83
CES04 = 70	CES29 = 90	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 96	CES55 = 91	CES80 = 89
CES06 = 51	CES31 = 92	CES56 = 88	CES81 = 70
CES07 = 42	CES32 = 86	CES57 = 87	CES82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

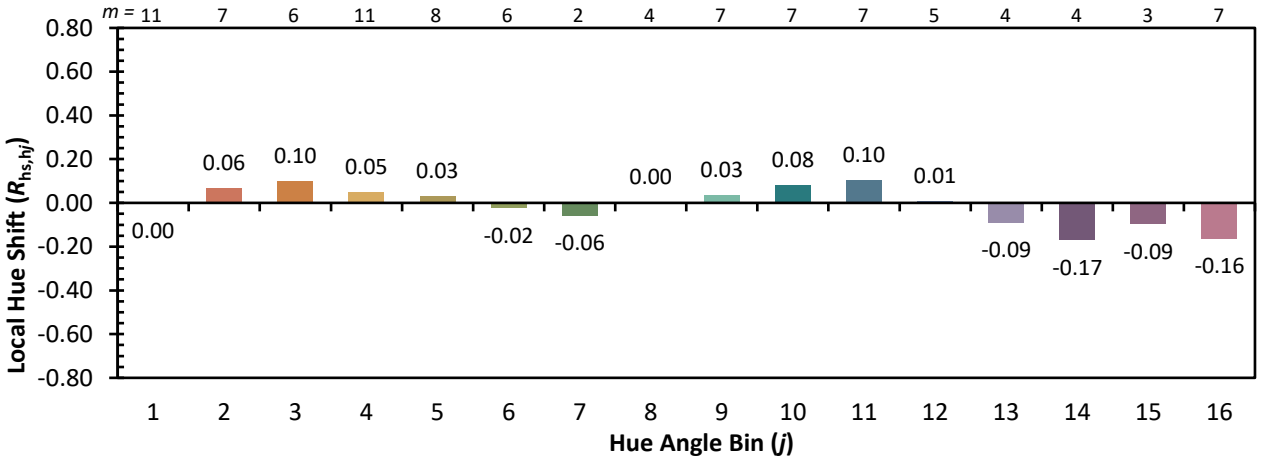


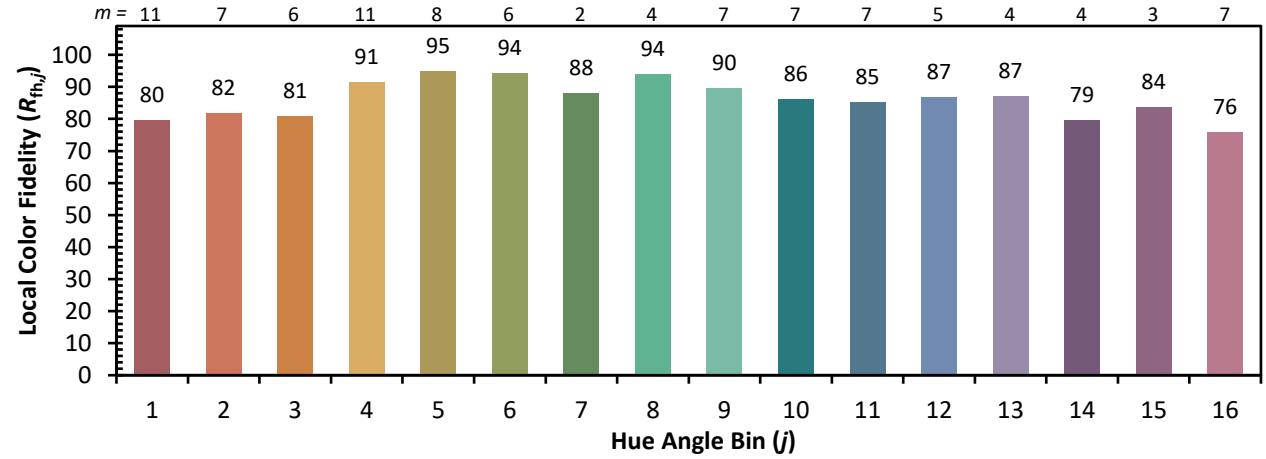
REPORT NUMBER: SP1-2411-284-4

TM-30-18

Color Rendition by Hue-Angle Bin



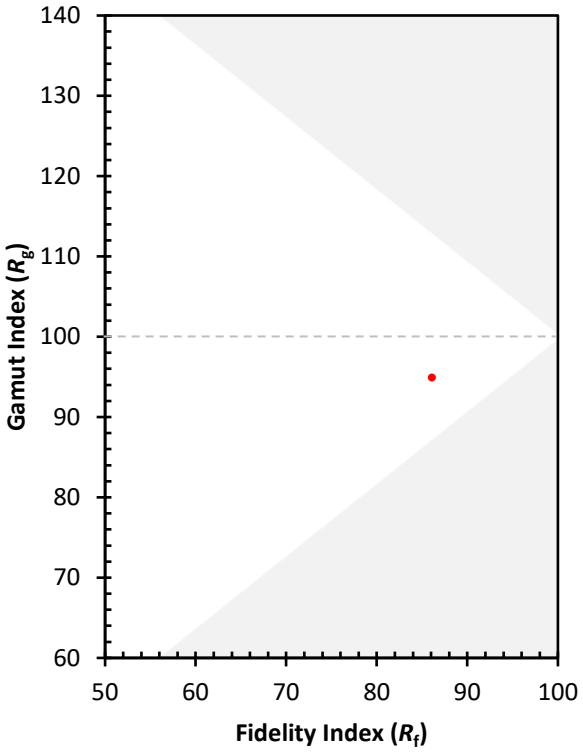


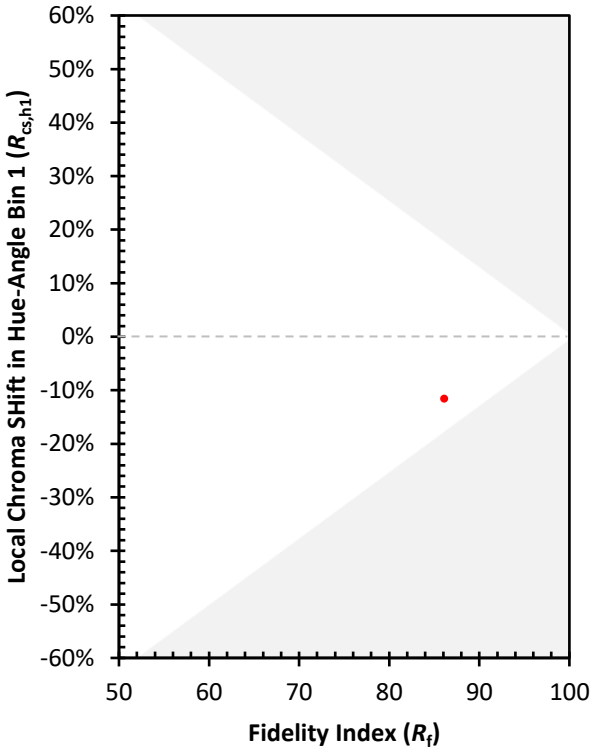


REPORT NUMBER: SP1-2411-284-4

TM-30-18

Measure Comparisons





(END OF REPORT)