

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: P1445244

Luminaire Tested: TPTN-VA3-735-U-DL-CG-GM

Issue Date: 05/21/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445244
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: MCGRAW-EDISON
Catalog Number: TPTN-VA3-735-U-DL-CG-GM
Description: TOPTIER NANO SPIDER MOUNT VISUAL COMFORT LED LUMINAIRE 60W 70CRI 3500K w/
DRIVE LANE TYPE IV DISTRIBUTION OPTIC AND GLASS
Light Source: 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4768.7 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Luminous Opening: Circular (Dia: 0.71' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 60
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.98
Total Harmonic Distortion (THDi): 5.3%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

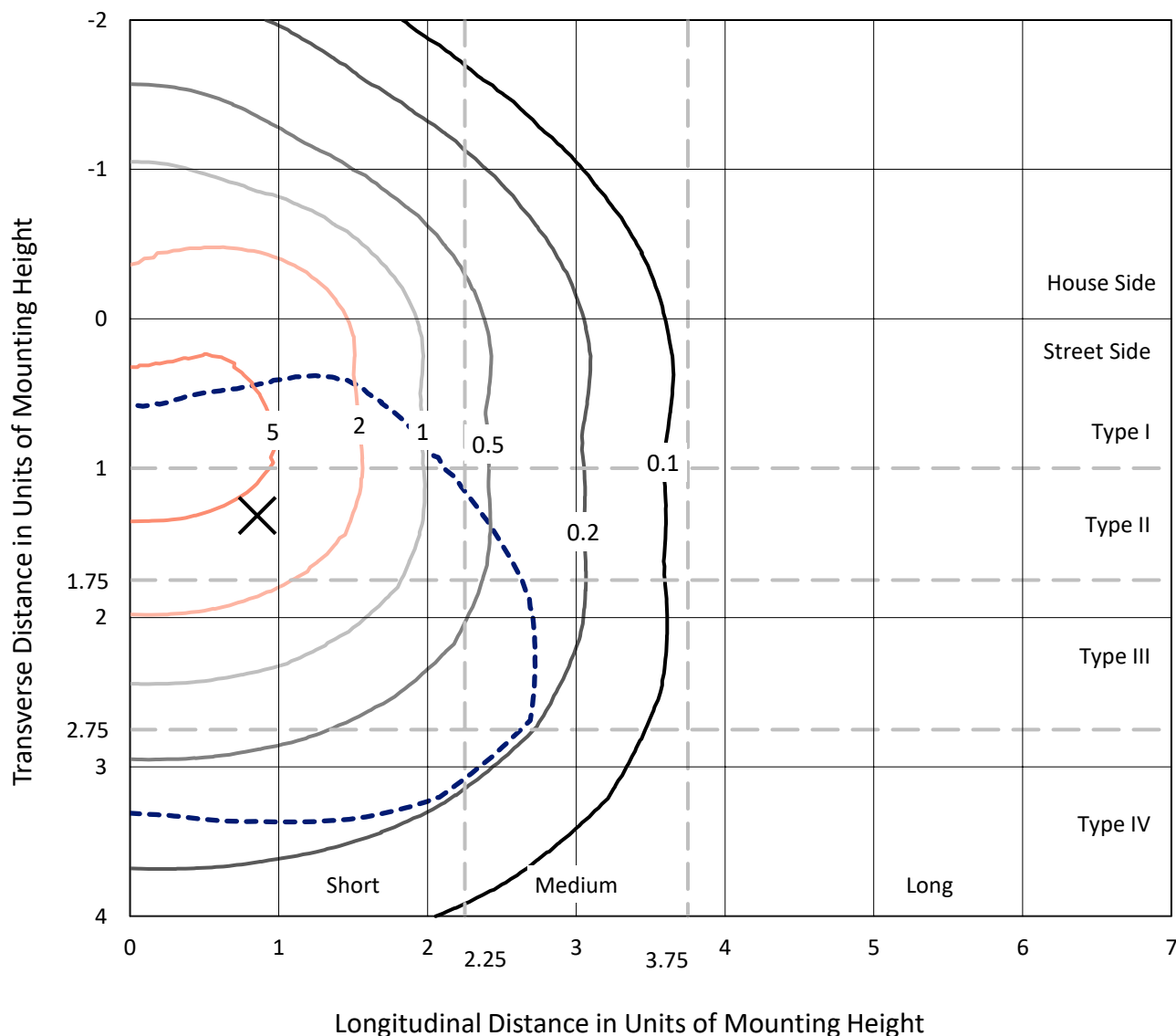
REPORT NUMBER: P1445244

CATALOG NUMBER: TPTN-VA3-735-U-DL-CG-GM

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

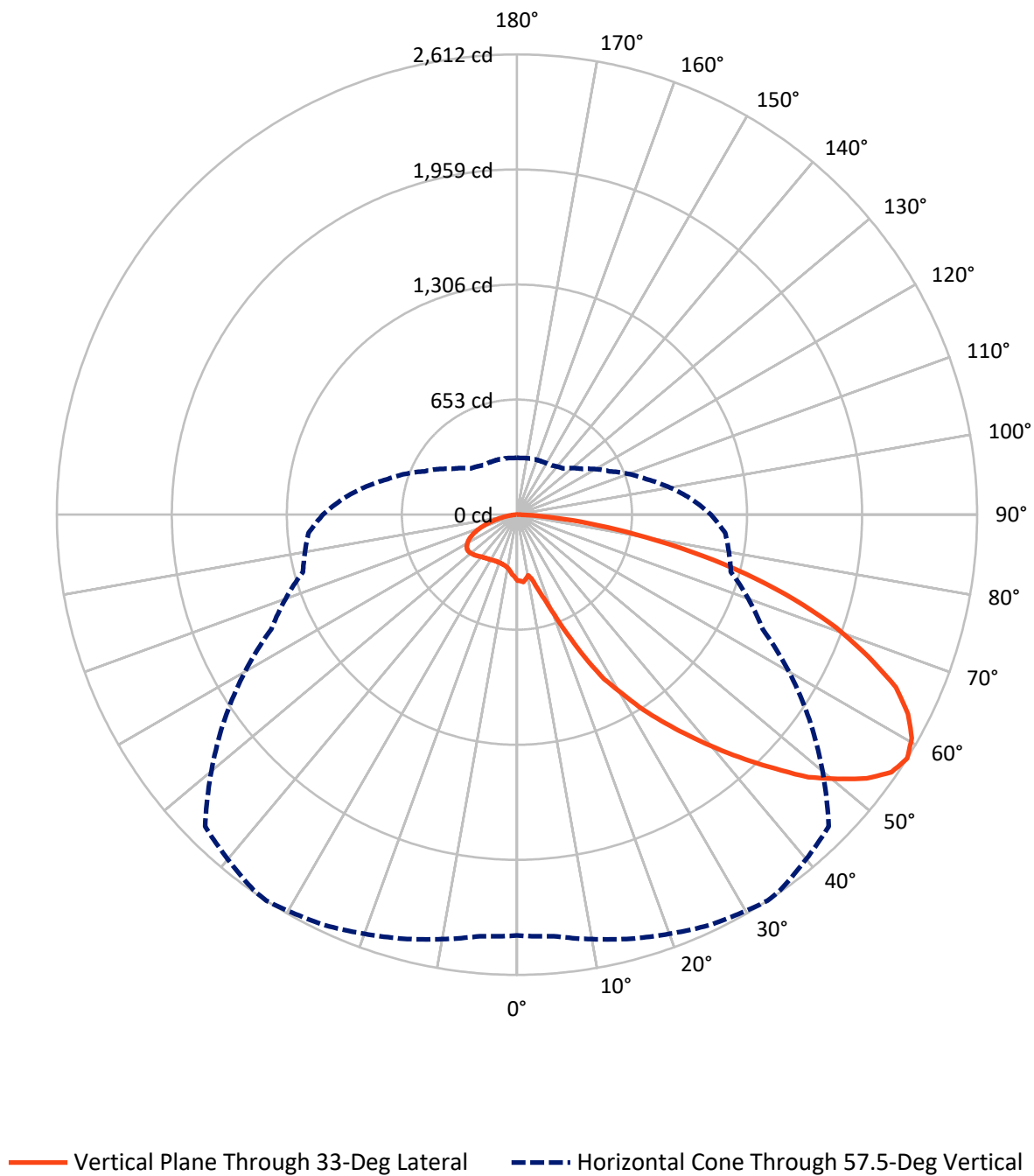


Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type IV - Short - N/A

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CATALOG NUMBER: TPTN-VA3-735-U-DL-CG-GM

Luminous Intensity Polar Plot



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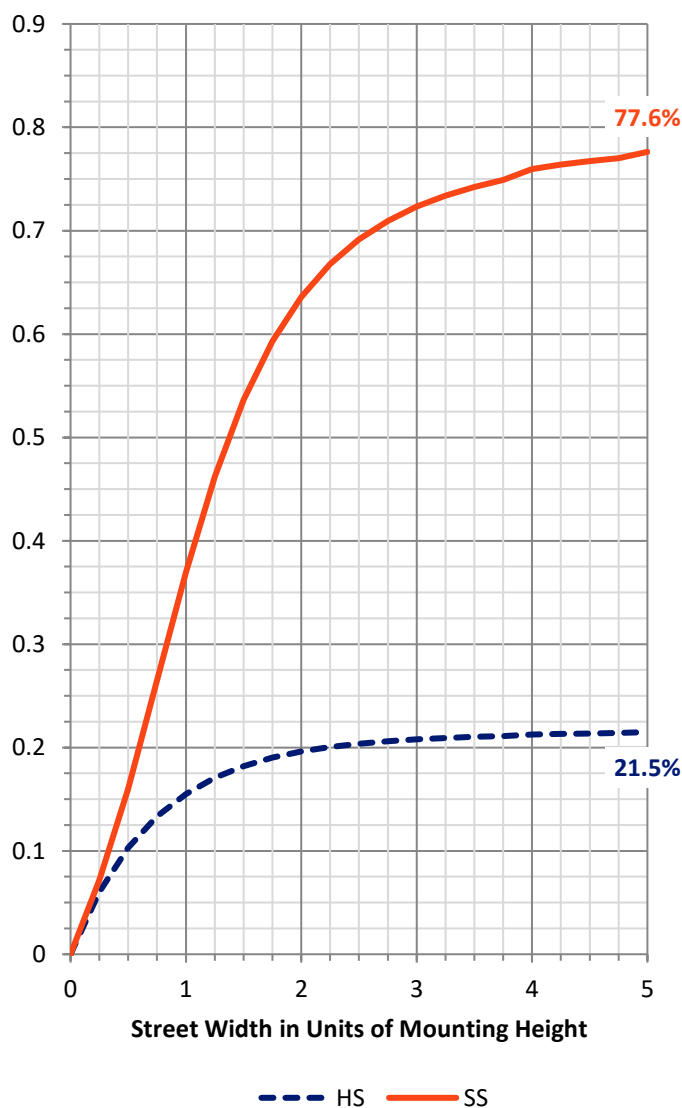
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1032.6	0.0	1032.6
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	3736.1	0.0	3736.1
	% Fixture	78.3	0.0	78.3
Total	Lumens	4768.7	0.0	4768.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.8	0.7
10°-20°	107.7	2.3
20°-30°	265.8	5.6
30°-40°	515.8	10.8
40°-50°	838.4	17.6
50°-60°	1133.6	23.8
60°-70°	1103.6	23.1
70°-80°	650.4	13.6
80°-90°	119.8	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°	4768.7	100.0
0°-180°	4768.7	100.0

Coefficient of Utilization



REPORT NUMBER: P1445244

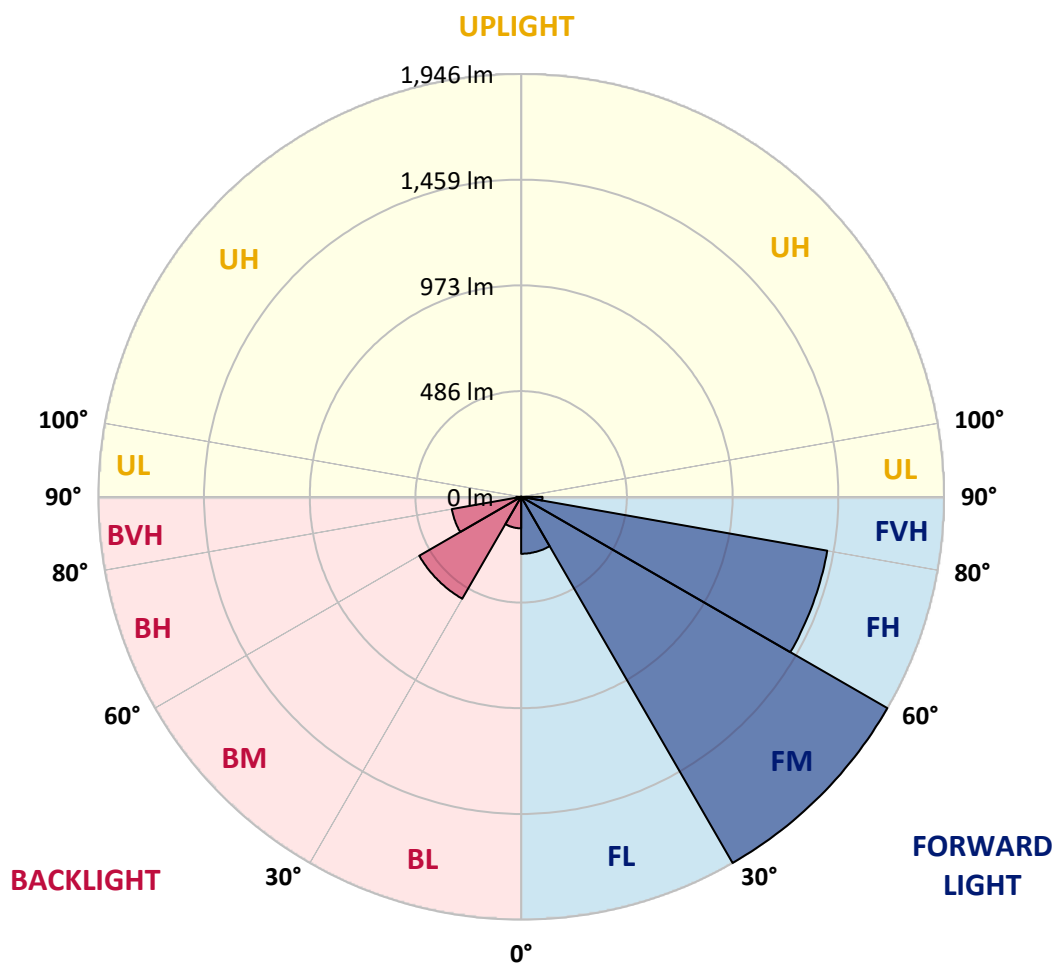
CATALOG NUMBER: TPTN-VA3-735-U-DL-CG-GM

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	262.1	5.5			
FM	(30°-60°)	1945.9	40.8			
FH	(60°-80°)	1430.1	30.0			G1/1800
FVH	(80°-90°)	97.9	2.1			G1/100
BL	(0°-30°)	145.1	3.0	B1/500		
BM	(30°-60°)	541.8	11.4	B1/1000		
BH	(60°-80°)	323.9	6.8	B1/500		G1/500
BVH	(80°-90°)	21.8	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: P1445244

CATALOG NUMBER: TPTN-VA3-735-U-DL-CG-GM

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	374.5	374.5	374.5	374.5	374.5	374.5	374.5	374.5	374.5	374.5	374.5
2.5°	379.3	378.3	378.3	377.4	376.4	376.4	375.5	374.5	372.6	370.7	368.8
5°	397.3	395.4	391.6	387.8	384.0	384.0	382.1	381.2	379.3	378.3	376.4
7.5°	379.3	379.3	377.4	372.6	367.0	366.0	357.5	354.6	357.5	356.5	357.5
10°	387.8	386.9	376.4	364.1	349.9	347.0	339.5	336.6	342.3	348.0	352.7
12.5°	417.2	417.2	405.8	389.7	374.5	370.7	354.6	348.9	349.9	356.5	362.2
15°	465.6	465.6	457.0	443.8	429.5	421.9	397.3	381.2	376.4	379.3	385.0
17.5°	539.5	535.7	540.5	521.5	502.5	495.9	457.0	427.6	415.3	416.3	418.2
20°	653.3	651.4	651.4	639.1	605.9	592.6	540.5	488.3	466.5	463.7	461.8
22.5°	798.4	793.6	795.5	780.4	739.6	728.2	647.6	574.6	530.0	516.8	515.8
25°	965.3	966.2	968.1	947.3	898.9	888.5	781.3	675.1	605.0	579.4	572.7
27.5°	1134.0	1134.0	1122.7	1092.3	1057.2	1039.2	922.6	786.1	688.4	650.5	632.4
30°	1285.8	1284.8	1260.2	1215.6	1179.6	1167.2	1038.3	890.4	768.0	711.1	688.4
32.5°	1432.7	1429.9	1386.3	1347.4	1321.8	1302.8	1163.4	990.9	844.8	769.0	740.5
35°	1582.5	1565.5	1515.2	1483.0	1455.5	1433.7	1295.2	1093.3	920.7	830.6	794.6
37.5°	1714.3	1709.6	1650.8	1626.2	1594.9	1583.5	1436.5	1198.5	1001.3	892.3	853.4
40°	1843.3	1841.4	1794.9	1770.3	1742.8	1726.7	1586.3	1313.3	1089.5	959.6	916.0
42.5°	1959.0	1962.8	1938.1	1922.0	1898.3	1886.0	1739.0	1433.7	1174.8	1023.1	976.6
45°	2088.9	2089.8	2085.1	2078.5	2056.6	2057.6	1903.0	1561.7	1270.6	1092.3	1040.2
47.5°	2208.4	2215.9	2227.3	2228.3	2226.4	2216.9	2077.5	1684.0	1360.7	1154.9	1099.9
50°	2293.7	2306.0	2347.7	2361.0	2357.2	2354.4	2216.9	1808.2	1432.7	1209.9	1141.6
52.5°	2375.2	2384.7	2445.4	2488.1	2487.1	2480.5	2348.7	1916.3	1502.9	1248.8	1180.5
55°	2415.1	2420.8	2499.5	2567.7	2580.1	2581.0	2468.2	1995.0	1542.7	1273.4	1200.4
57.5°	2388.5	2401.8	2491.9	2572.5	2612.3	2603.8	2503.2	2026.3	1538.9	1257.3	1187.1
60°	2326.9	2345.8	2432.1	2524.1	2575.3	2563.0	2469.1	2014.0	1504.8	1216.5	1157.8
62.5°	2233.0	2256.7	2341.1	2430.2	2490.9	2494.7	2406.5	1977.0	1441.3	1166.3	1111.3
65°	2052.9	2084.1	2209.3	2307.0	2364.8	2379.0	2283.3	1888.8	1358.8	1090.4	1025.0
67.5°	1855.6	1876.5	1977.0	2120.2	2150.5	2170.4	2114.5	1742.8	1251.6	971.0	919.8
70°	1630.9	1663.1	1742.8	1883.1	1922.9	1937.2	1904.0	1562.6	1098.0	839.2	810.7
72.5°	1379.6	1392.9	1483.0	1588.2	1648.9	1666.9	1631.9	1355.0	929.2	699.8	678.0
75°	1081.9	1102.8	1172.0	1276.3	1342.7	1337.9	1332.2	1109.4	735.8	557.5	535.7
77.5°	803.1	814.5	881.8	957.7	1011.7	1016.5	1014.6	845.8	551.9	405.8	390.7
80°	524.4	538.6	587.9	647.6	683.7	699.8	694.1	589.8	378.3	273.1	261.7
82.5°	296.8	300.6	337.6	369.8	414.4	411.5	422.9	359.4	230.4	160.2	146.0
85°	105.3	111.9	130.9	165.0	183.0	195.3	197.2	168.8	103.4	72.1	54.0
87.5°	10.4	10.4	18.0	26.5	34.1	36.0	37.0	37.9	30.3	23.7	7.6
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: P1445244

CATALOG NUMBER: TPTN-VA3-735-U-DL-CG-GM

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	374.5	374.5	374.5	374.5	374.5	374.5	374.5	374.5	374.5	374.5	374.5
2.5°	368.8	367.0	363.2	359.4	358.4	354.6	353.7	352.7	350.8	350.8	349.9
5°	372.6	370.7	365.1	358.4	351.8	346.1	341.4	336.6	332.8	330.0	330.0
7.5°	359.4	360.3	360.3	355.6	346.1	335.7	323.3	313.9	305.3	301.5	299.6
10°	353.7	356.5	355.6	350.8	341.4	327.1	311.0	295.8	283.5	275.9	275.0
12.5°	364.1	364.1	361.3	353.7	340.4	322.4	303.4	283.5	269.3	260.8	259.8
15°	386.9	385.9	375.5	361.3	342.3	321.4	299.6	277.8	259.8	250.3	249.4
17.5°	419.1	414.4	397.3	372.6	347.0	321.4	296.8	273.1	254.1	242.7	240.8
20°	458.9	449.4	422.9	386.9	352.7	323.3	294.9	269.3	250.3	238.0	237.0
22.5°	508.2	493.1	451.3	403.0	362.2	327.1	294.9	267.4	249.4	239.9	239.9
25°	557.5	536.7	483.6	421.0	371.7	330.0	294.9	269.3	254.1	247.5	246.5
27.5°	611.6	582.2	514.9	441.9	381.2	333.8	296.8	270.2	258.9	254.1	254.1
30°	660.9	627.7	547.1	461.8	391.6	338.5	300.6	273.1	261.7	259.8	257.9
32.5°	707.4	668.5	577.5	480.7	403.9	343.2	303.4	275.9	265.5	263.6	262.7
35°	758.6	715.9	605.0	498.8	413.4	350.8	307.2	280.7	270.2	268.3	268.3
37.5°	813.6	760.5	637.2	517.7	422.9	358.4	311.0	287.3	276.9	275.0	274.0
40°	866.7	807.9	669.4	536.7	434.3	364.1	315.8	293.0	284.5	282.6	281.6
42.5°	923.5	856.2	700.7	553.7	445.7	369.8	322.4	301.5	293.9	290.1	289.2
45°	975.7	902.7	729.2	571.8	456.1	376.4	330.0	312.0	304.4	300.6	299.6
47.5°	1026.0	942.5	755.7	585.0	464.6	381.2	337.6	320.5	314.8	311.0	309.1
50°	1066.7	974.7	774.7	593.6	470.3	384.0	343.2	328.1	323.3	317.6	316.7
52.5°	1096.1	1000.4	788.0	600.2	471.3	384.0	347.0	336.6	330.9	325.2	323.3
55°	1110.3	1009.8	787.0	597.4	465.6	381.2	347.0	338.5	333.8	327.1	326.2
57.5°	1100.9	996.6	769.0	581.2	452.3	370.7	341.4	332.8	328.1	322.4	322.4
60°	1071.5	969.1	740.5	556.6	431.4	353.7	329.0	322.4	317.6	312.9	312.9
62.5°	1025.0	929.2	704.5	519.6	405.8	333.8	312.9	307.2	304.4	299.6	298.7
65°	944.4	851.5	653.3	480.7	371.7	308.2	290.1	288.3	284.5	277.8	276.9
67.5°	851.5	766.1	578.4	432.4	331.9	275.9	262.7	260.8	257.0	251.3	252.2
70°	747.2	671.3	500.6	372.6	283.5	240.8	229.5	226.6	223.8	222.8	221.9
72.5°	629.6	565.1	419.1	304.4	237.0	202.9	193.4	191.5	189.6	188.7	187.7
75°	489.3	445.7	334.7	239.9	187.7	163.1	154.6	153.6	153.6	151.7	149.8
77.5°	360.3	324.3	243.7	174.5	135.6	118.5	115.7	115.7	116.6	115.7	112.8
80°	238.9	216.2	159.3	115.7	90.1	78.7	78.7	79.6	80.6	79.6	80.6
82.5°	127.1	119.5	90.1	67.3	53.1	46.5	47.4	48.4	50.3	48.4	50.3
85°	46.5	47.4	39.8	30.3	25.6	23.7	24.7	25.6	26.5	25.6	25.6
87.5°	2.8	9.5	16.1	14.2	12.3	12.3	12.3	12.3	12.3	11.4	10.4
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: SP1-2411-284-1

Test Date: 11/15/2024

Luminaire Tested: TTN-D0-735-U-WQ

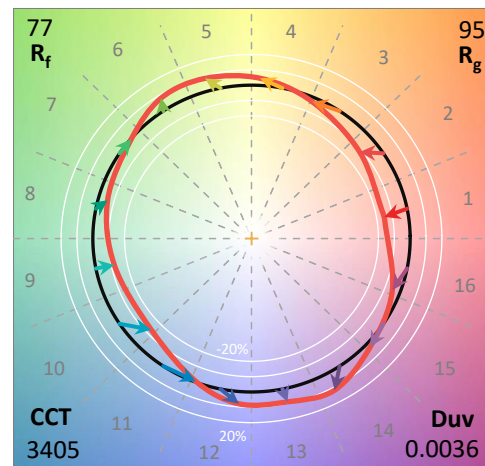
Data in this report applies to families of products including TTN-D0-735-U-WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2411-284-1
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 11/15/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **TTN-D0-735-U-WQ**
 Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE. 3500K, 70 CRI LEDS AND WIDE DISTRIBUTION

Spectral Parameters

CCT (K):	3405	CRI (Ra):	73.9		
CIE u':	0.2365	R1:	71.3	R9:	-18.0
CIE v':	0.5180	R2:	80.3	R10:	53.1
Duv:	0.0036	R3:	87.8	R11:	68.6
CIE x:	0.4148	R4:	73.2	R12:	42.6
CIE y:	0.4038	R5:	69.8	R13:	72.5
CIE z:	0.1814	R6:	71.8	R14:	92.7
Peak Wavelength (nm):	596	R7:	82.8	R15:	64.3
Dominant Wavelength (nm):	579	R8:	54.1		
Purity:	45.70672				
Rf:	76.6				
Rg:	95.4				



Test Conditions

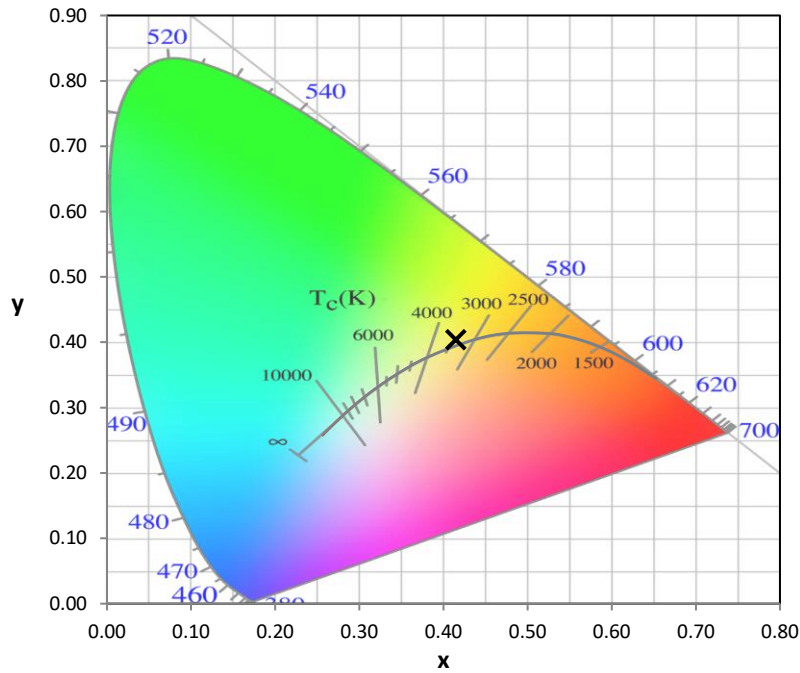
Stabilization Time: 38M
 Operation Time: 1H 38M
 Sphere Temperature (°C): 24.9

REPORT NUMBER: SP1-2411-284-1

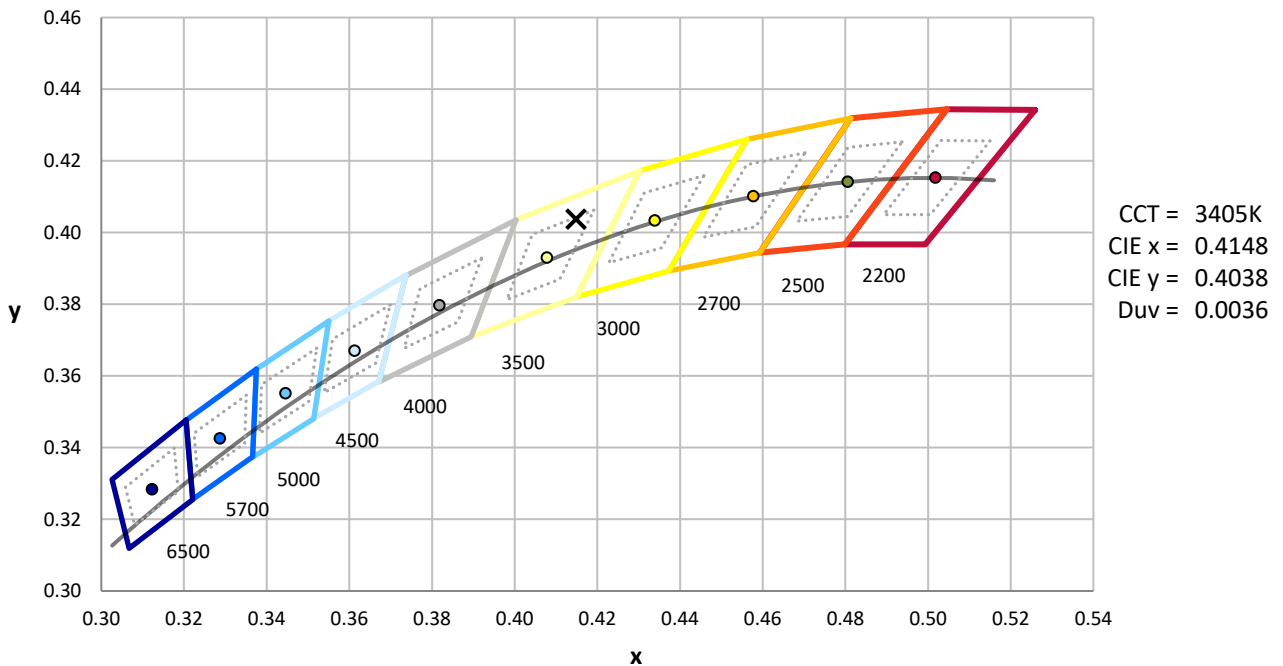
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



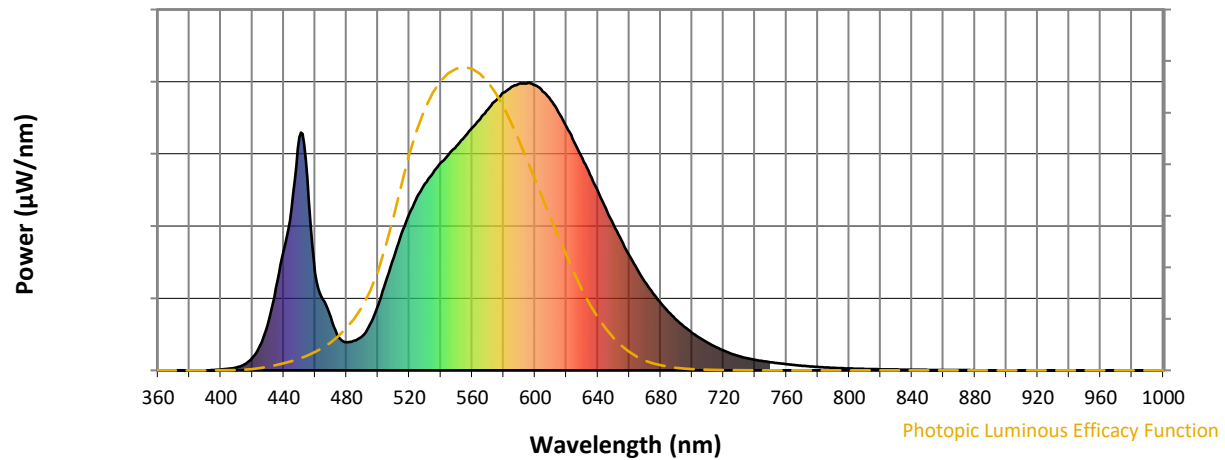
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

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Photopic Flux vs. Wavelength

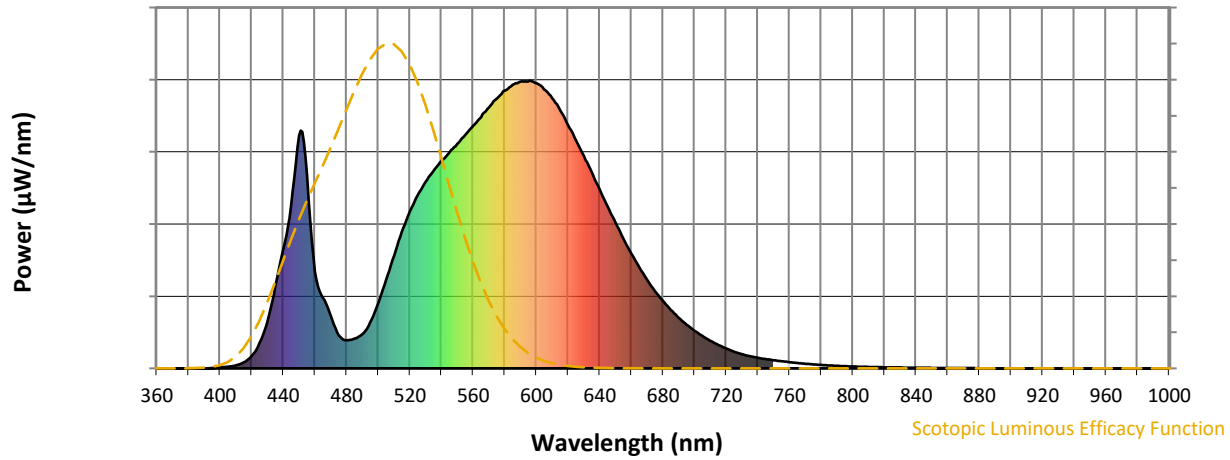


Photopic Lumens: NR

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	119	NR	620	846	NR	750	28	NR	880	1	NR
365	0	NR	495	160	NR	625	793	NR	755	25	NR	885	0	NR
370	0	NR	500	225	NR	630	739	NR	760	22	NR	890	0	NR
375	0	NR	505	308	NR	635	681	NR	765	19	NR	895	0	NR
380	0	NR	510	392	NR	640	623	NR	770	16	NR	900	0	NR
385	0	NR	515	474	NR	645	563	NR	775	14	NR	905	0	NR
390	0	NR	520	545	NR	650	506	NR	780	12	NR	910	0	NR
395	1	NR	525	603	NR	655	451	NR	785	10	NR	915	0	NR
400	3	NR	530	649	NR	660	399	NR	790	9	NR	920	0	NR
405	5	NR	535	687	NR	665	352	NR	795	8	NR	925	0	NR
410	11	NR	540	721	NR	670	307	NR	800	6	NR	930	0	NR
415	21	NR	545	751	NR	675	268	NR	805	6	NR	935	0	NR
420	43	NR	550	779	NR	680	234	NR	810	5	NR	940	0	NR
425	88	NR	555	811	NR	685	203	NR	815	4	NR	945	0	NR
430	163	NR	560	843	NR	690	176	NR	820	4	NR	950	0	NR
435	288	NR	565	873	NR	695	152	NR	825	3	NR	955	0	NR
440	416	NR	570	907	NR	700	131	NR	830	3	NR	960	0	NR
445	566	NR	575	938	NR	705	112	NR	835	3	NR	965	0	NR
450	810	NR	580	965	NR	710	96	NR	840	2	NR	970	0	NR
455	669	NR	585	986	NR	715	81	NR	845	2	NR	975	0	NR
460	338	NR	590	997	NR	720	69	NR	850	2	NR	980	0	NR
465	246	NR	595	997	NR	725	58	NR	855	1	NR	985	0	NR
470	182	NR	600	991	NR	730	49	NR	860	1	NR	990	0	NR
475	115	NR	605	968	NR	735	42	NR	865	1	NR	995	0	NR
480	97	NR	610	939	NR	740	37	NR	870	1	NR	1000	0	NR
485	103	NR	615	896	NR	745	32	NR	875	1	NR			

REPORT NUMBER: SP1-2411-284-1

Scotopic Flux vs. Wavelength



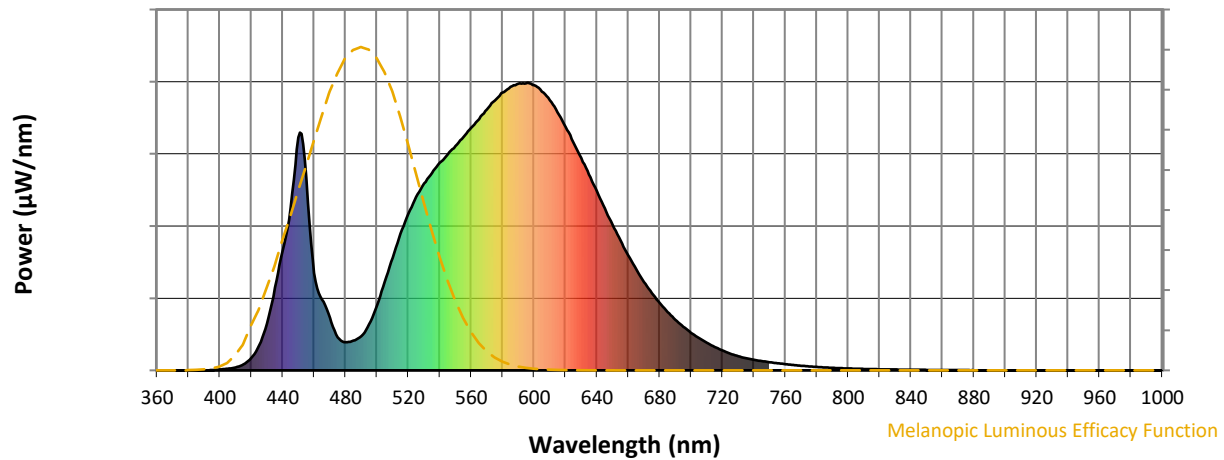
Scotopic Lumens: NR

S/P: 1.33

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	119	NR	620	846	NR	750	28	NR	880	1	NR
365	0	NR	495	160	NR	625	793	NR	755	25	NR	885	0	NR
370	0	NR	500	225	NR	630	739	NR	760	22	NR	890	0	NR
375	0	NR	505	308	NR	635	681	NR	765	19	NR	895	0	NR
380	0	NR	510	392	NR	640	623	NR	770	16	NR	900	0	NR
385	0	NR	515	474	NR	645	563	NR	775	14	NR	905	0	NR
390	0	NR	520	545	NR	650	506	NR	780	12	NR	910	0	NR
395	1	NR	525	603	NR	655	451	NR	785	10	NR	915	0	NR
400	3	NR	530	649	NR	660	399	NR	790	9	NR	920	0	NR
405	5	NR	535	687	NR	665	352	NR	795	8	NR	925	0	NR
410	11	NR	540	721	NR	670	307	NR	800	6	NR	930	0	NR
415	21	NR	545	751	NR	675	268	NR	805	6	NR	935	0	NR
420	43	NR	550	779	NR	680	234	NR	810	5	NR	940	0	NR
425	88	NR	555	811	NR	685	203	NR	815	4	NR	945	0	NR
430	163	NR	560	843	NR	690	176	NR	820	4	NR	950	0	NR
435	288	NR	565	873	NR	695	152	NR	825	3	NR	955	0	NR
440	416	NR	570	907	NR	700	131	NR	830	3	NR	960	0	NR
445	566	NR	575	938	NR	705	112	NR	835	3	NR	965	0	NR
450	810	NR	580	965	NR	710	96	NR	840	2	NR	970	0	NR
455	669	NR	585	986	NR	715	81	NR	845	2	NR	975	0	NR
460	338	NR	590	997	NR	720	69	NR	850	2	NR	980	0	NR
465	246	NR	595	997	NR	725	58	NR	855	1	NR	985	0	NR
470	182	NR	600	991	NR	730	49	NR	860	1	NR	990	0	NR
475	115	NR	605	968	NR	735	42	NR	865	1	NR	995	0	NR
480	97	NR	610	939	NR	740	37	NR	870	1	NR	1000	0	NR
485	103	NR	615	896	NR	745	32	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.47

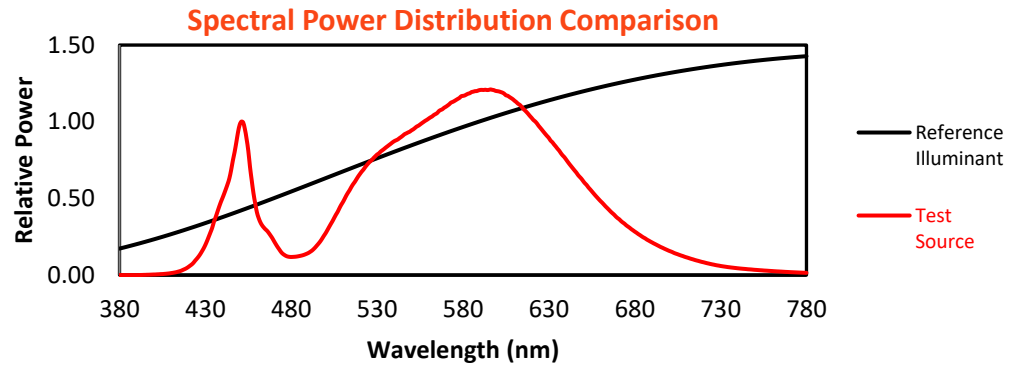
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	119	NR	620	846	NR	750	28	NR	880	1	NR
365	0	NR	495	160	NR	625	793	NR	755	25	NR	885	0	NR
370	0	NR	500	225	NR	630	739	NR	760	22	NR	890	0	NR
375	0	NR	505	308	NR	635	681	NR	765	19	NR	895	0	NR
380	0	NR	510	392	NR	640	623	NR	770	16	NR	900	0	NR
385	0	NR	515	474	NR	645	563	NR	775	14	NR	905	0	NR
390	0	NR	520	545	NR	650	506	NR	780	12	NR	910	0	NR
395	1	NR	525	603	NR	655	451	NR	785	10	NR	915	0	NR
400	3	NR	530	649	NR	660	399	NR	790	9	NR	920	0	NR
405	5	NR	535	687	NR	665	352	NR	795	8	NR	925	0	NR
410	11	NR	540	721	NR	670	307	NR	800	6	NR	930	0	NR
415	21	NR	545	751	NR	675	268	NR	805	6	NR	935	0	NR
420	43	NR	550	779	NR	680	234	NR	810	5	NR	940	0	NR
425	88	NR	555	811	NR	685	203	NR	815	4	NR	945	0	NR
430	163	NR	560	843	NR	690	176	NR	820	4	NR	950	0	NR
435	288	NR	565	873	NR	695	152	NR	825	3	NR	955	0	NR
440	416	NR	570	907	NR	700	131	NR	830	3	NR	960	0	NR
445	566	NR	575	938	NR	705	112	NR	835	3	NR	965	0	NR
450	810	NR	580	965	NR	710	96	NR	840	2	NR	970	0	NR
455	669	NR	585	986	NR	715	81	NR	845	2	NR	975	0	NR
460	338	NR	590	997	NR	720	69	NR	850	2	NR	980	0	NR
465	246	NR	595	997	NR	725	58	NR	855	1	NR	985	0	NR
470	182	NR	600	991	NR	730	49	NR	860	1	NR	990	0	NR
475	115	NR	605	968	NR	735	42	NR	865	1	NR	995	0	NR
480	97	NR	610	939	NR	740	37	NR	870	1	NR	1000	0	NR
485	103	NR	615	896	NR	745	32	NR	875	1	NR			

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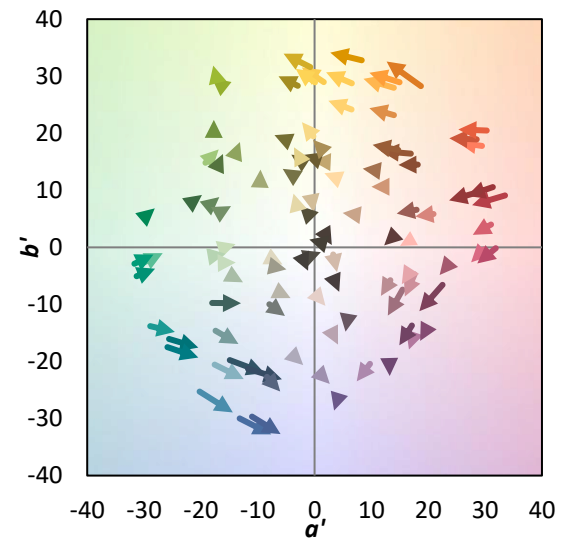
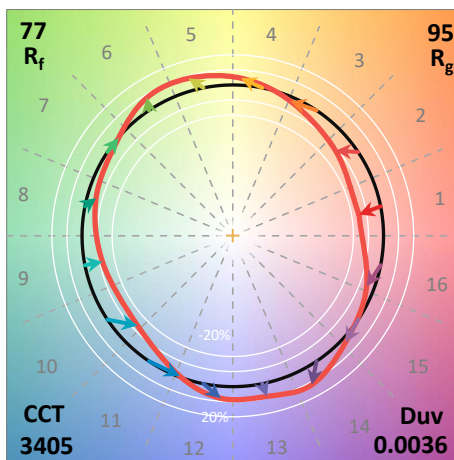
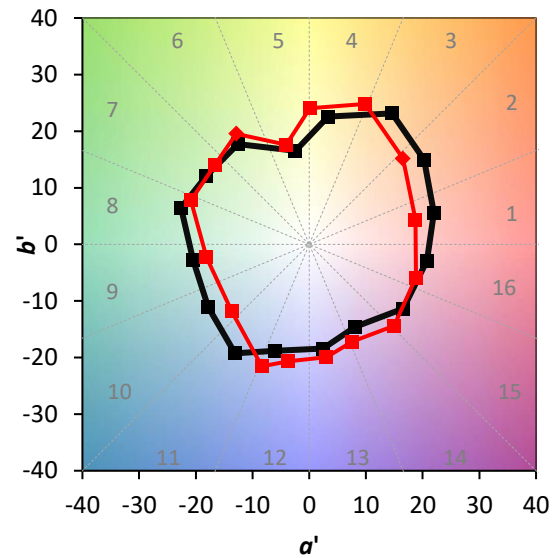
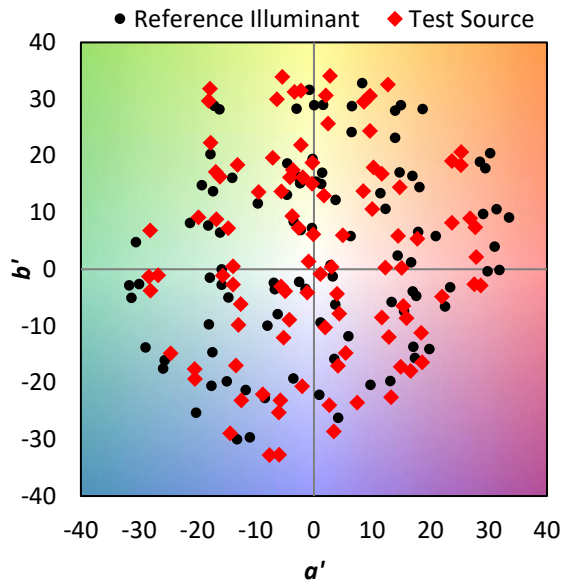
TM-30-18

Summary

$R_f = 76.6$
 $R_g = 95.4$
 $CIE R_a = 73.9$
 $R_g = -18.0$

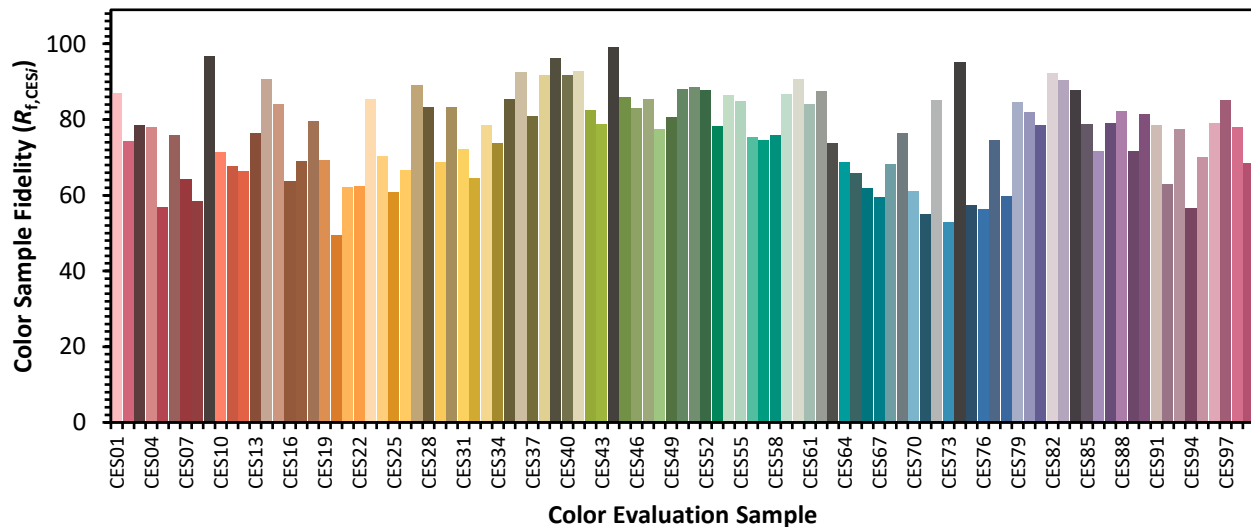


Color Vector Graphics

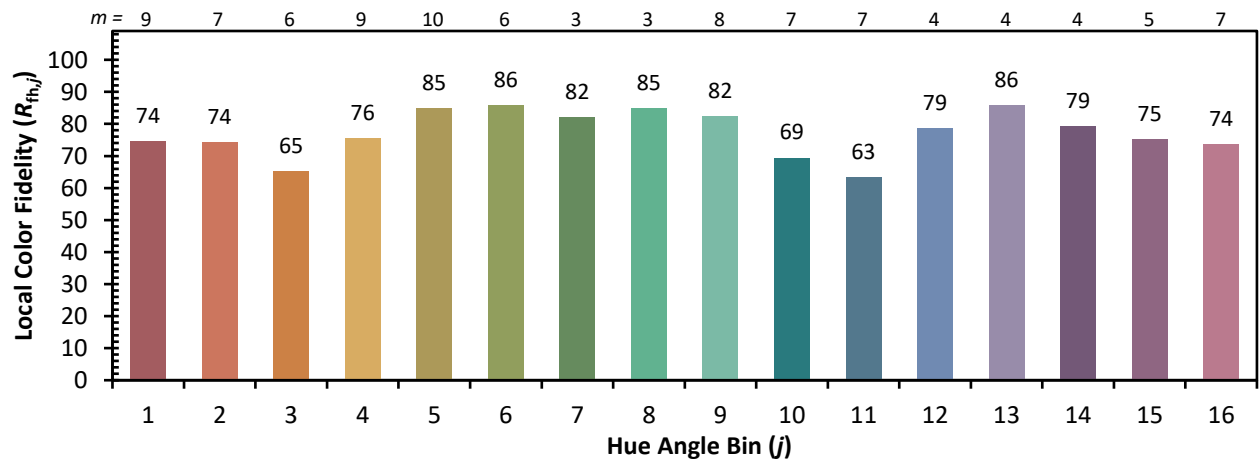
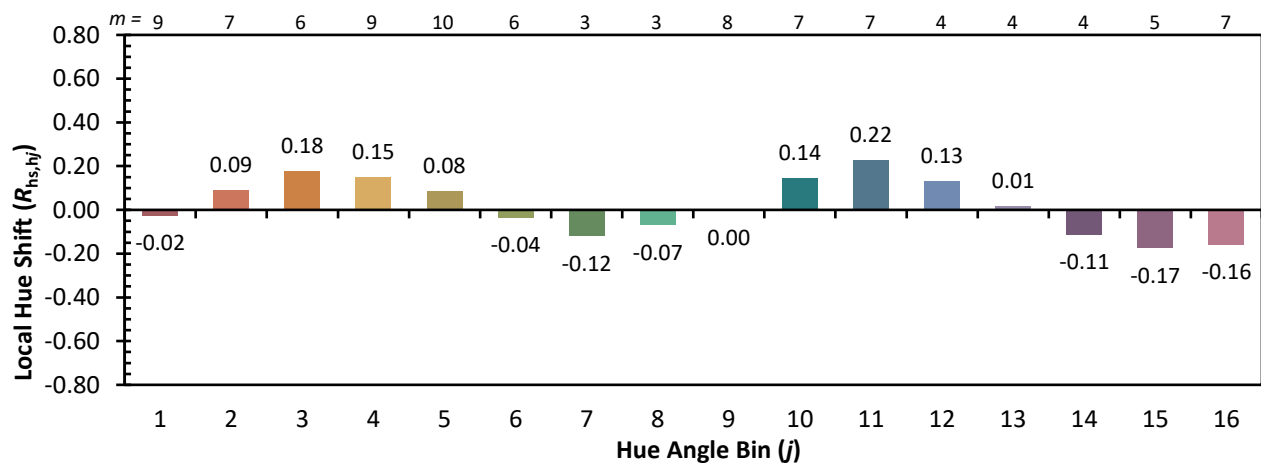
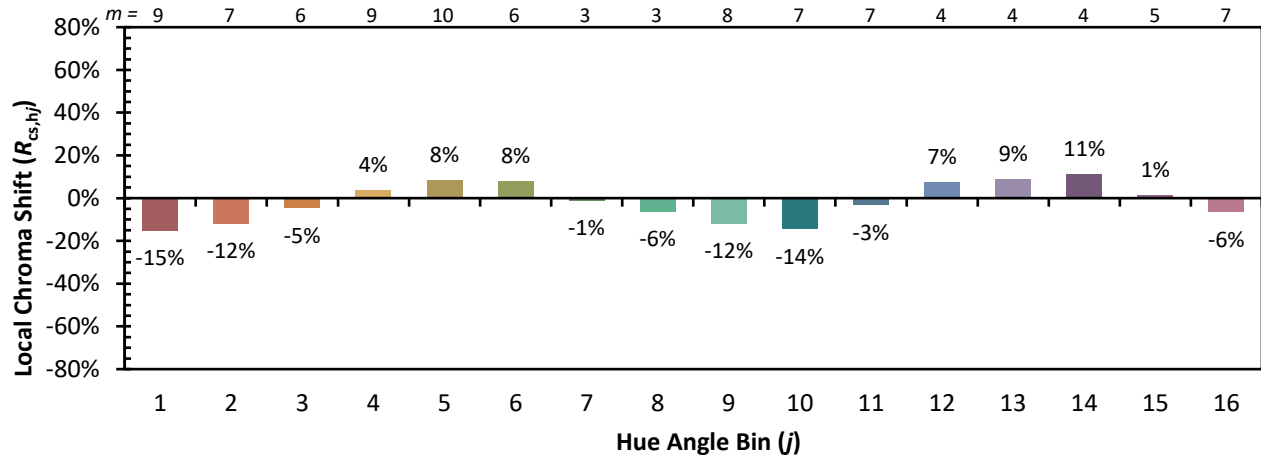


Individual Sample Fidelity Index ($R_{f,i}$)

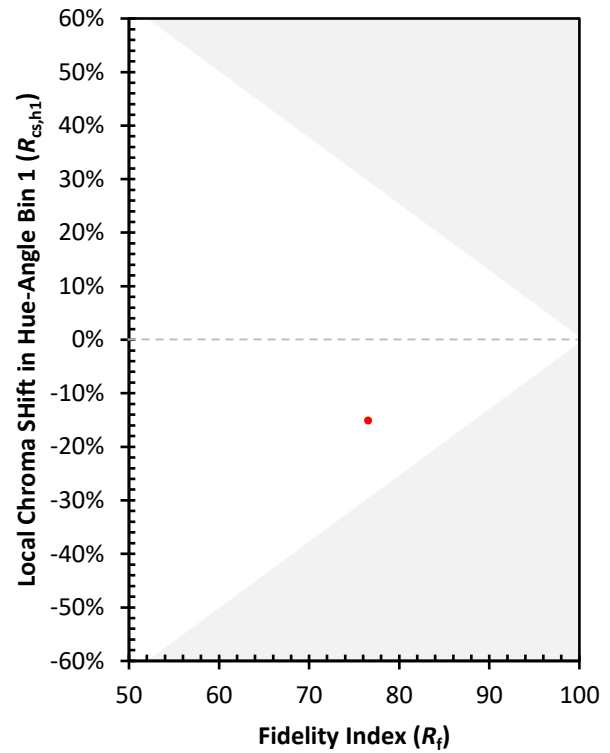
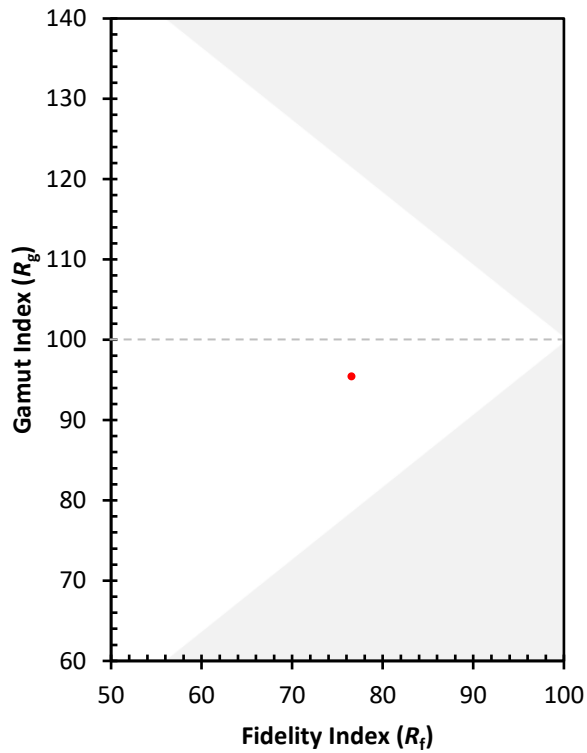
CES01 = 86	CES26 = 67	CES51 = 88	CES76 = 56
CES02 = 62	CES27 = 89	CES52 = 88	CES77 = 75
CES03 = 31	CES28 = 83	CES53 = 78	CES78 = 60
CES04 = 70	CES29 = 69	CES54 = 86	CES79 = 85
CES05 = 48	CES30 = 83	CES55 = 85	CES80 = 82
CES06 = 51	CES31 = 72	CES56 = 75	CES81 = 78
CES07 = 41	CES32 = 65	CES57 = 75	CES82 = 92
CES08 = 40	CES33 = 78	CES58 = 76	CES83 = 90
CES09 = 29	CES34 = 74	CES59 = 87	CES84 = 88
CES10 = 75	CES35 = 86	CES60 = 91	CES85 = 79
CES11 = 58	CES36 = 93	CES61 = 84	CES86 = 72
CES12 = 64	CES37 = 81	CES62 = 88	CES87 = 79
CES13 = 43	CES38 = 92	CES63 = 74	CES88 = 82
CES14 = 74	CES39 = 96	CES64 = 69	CES89 = 72
CES15 = 71	CES40 = 92	CES65 = 66	CES90 = 82
CES16 = 47	CES41 = 93	CES66 = 62	CES91 = 79
CES17 = 50	CES42 = 83	CES67 = 60	CES92 = 63
CES18 = 56	CES43 = 79	CES68 = 68	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 76	CES94 = 56
CES20 = 65	CES45 = 86	CES70 = 61	CES95 = 70
CES21 = 86	CES46 = 83	CES71 = 55	CES96 = 79
CES22 = 79	CES47 = 85	CES72 = 85	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 53	CES98 = 78
CES24 = 91	CES49 = 81	CES74 = 95	CES99 = 68
CES25 = 72	CES50 = 88	CES75 = 57	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)