

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: P1445251

Luminaire Tested: TPTN-VA2-750-U-DL-CG-GM

Issue Date: 05/21/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445251
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: MCGRAW-EDISON
Catalog Number: TPTN-VA2-750-U-DL-CG-GM
Description: TOPTIER NANO SPIDER MOUNT VISUAL COMFORT LED LUMINAIRE 42W 70CRI 5000K w/
DRIVE LANE TYPE IV DISTRIBUTION OPTIC AND GLASS
Light Source: 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3657.9 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Luminous Opening: Circular (Dia: 0.71' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 42.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.98
Total Harmonic Distortion (THDi): 7.5%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

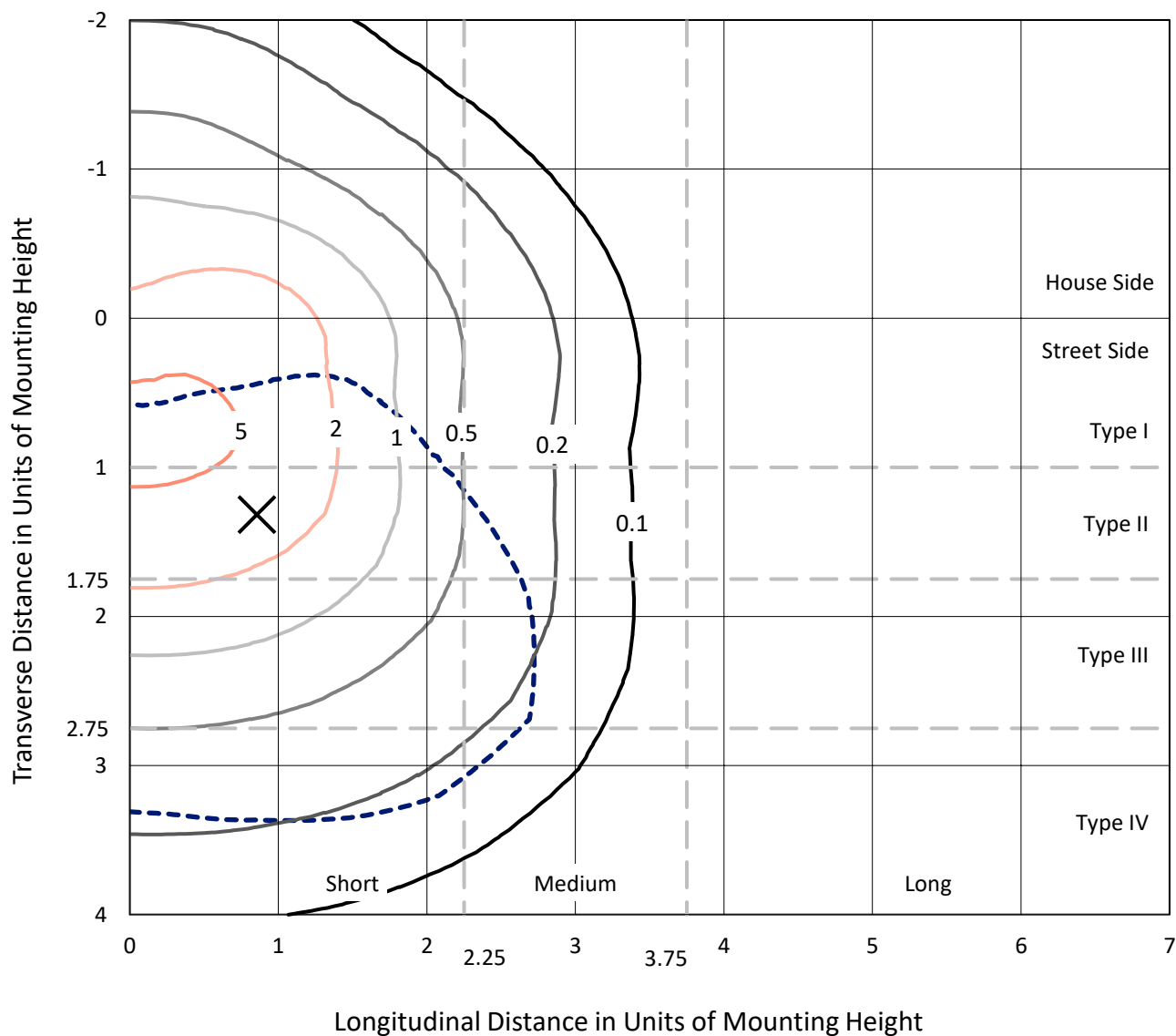
REPORT NUMBER: P1445251

CATALOG NUMBER: TPTN-VA2-750-U-DL-CG-GM

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



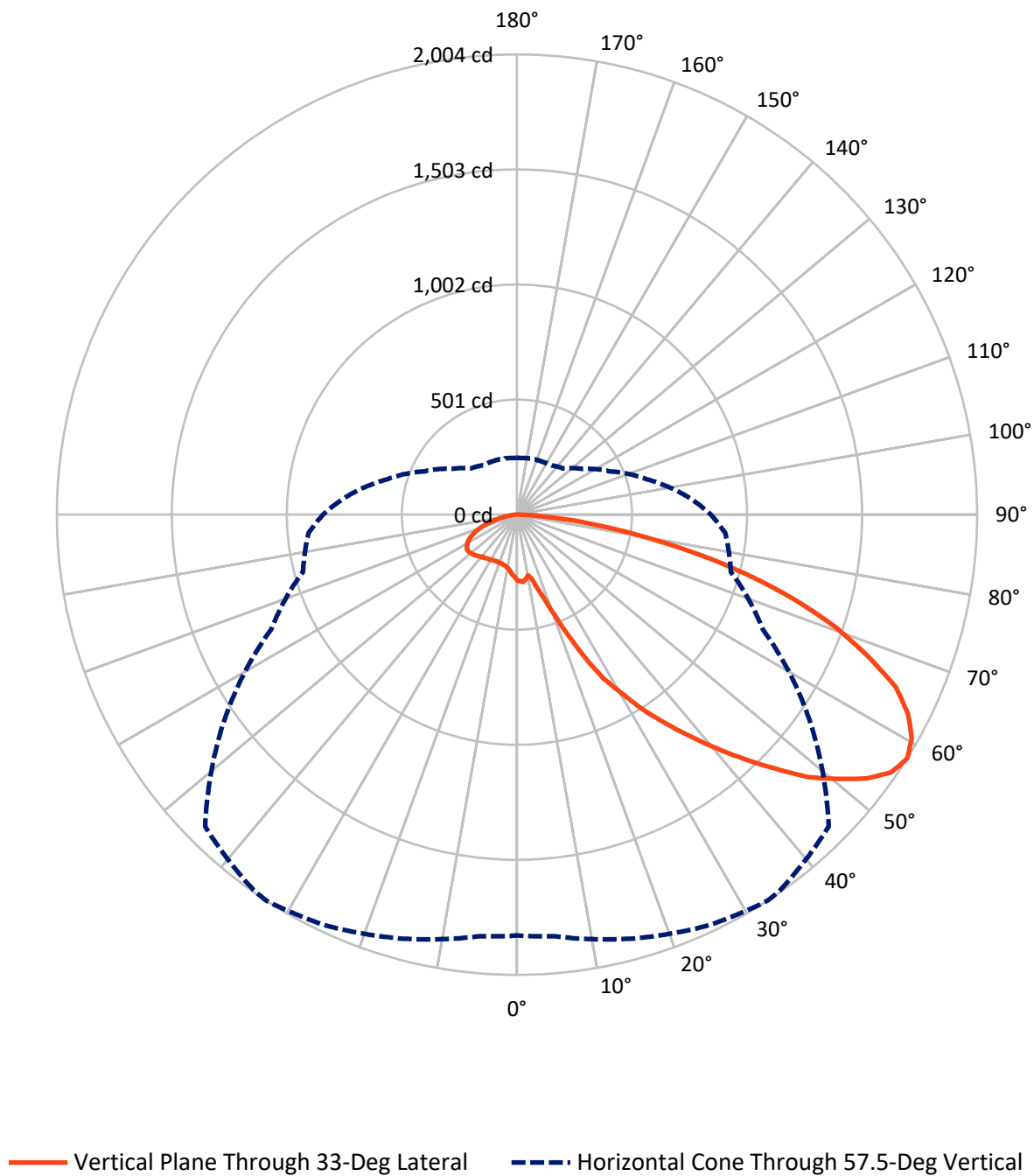
Based on 10 foot mounting height. Maximum calculated value = 6.6 fc

Type IV - Short - N/A

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CATALOG NUMBER: TPTN-VA2-750-U-DL-CG-GM

Luminous Intensity Polar Plot



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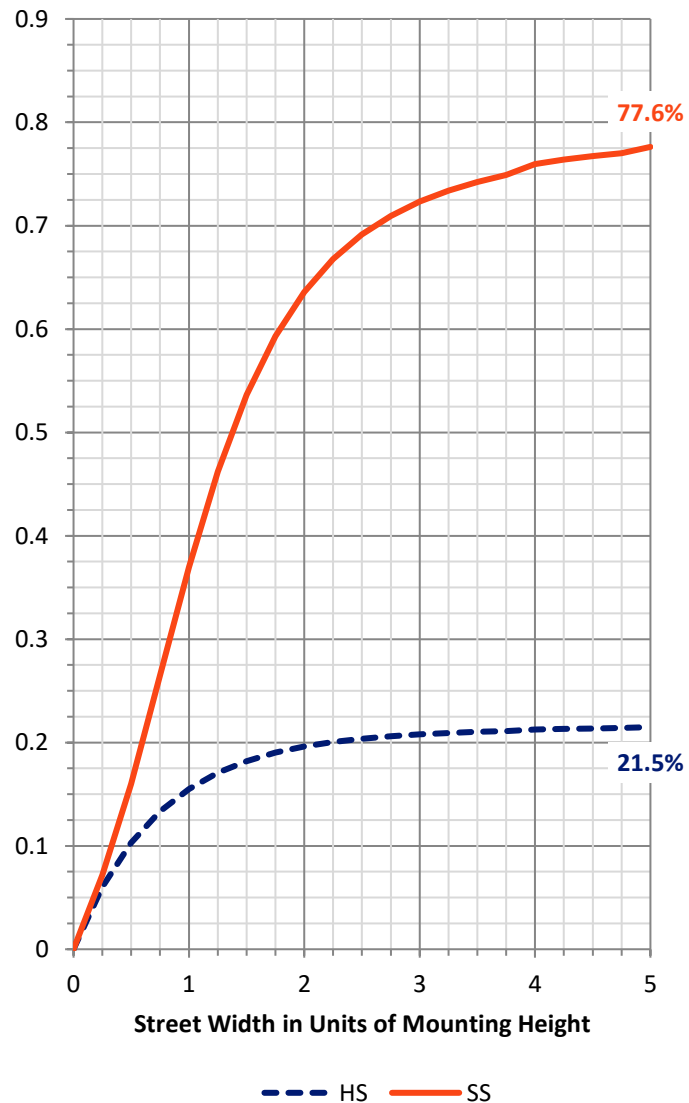
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	792.1	0.0	792.1
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	2865.8	0.0	2865.8
	% Fixture	78.3	0.0	78.3
Total	Lumens	3657.9	0.0	3657.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.9	0.7
10°-20°	82.6	2.3
20°-30°	203.8	5.6
30°-40°	395.6	10.8
40°-50°	643.1	17.6
50°-60°	869.5	23.8
60°-70°	846.6	23.1
70°-80°	498.9	13.6
80°-90°	91.9	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°	3657.9	100.0
0°-180°	3657.9	100.0

Coefficient of Utilization



REPORT NUMBER: P1445251

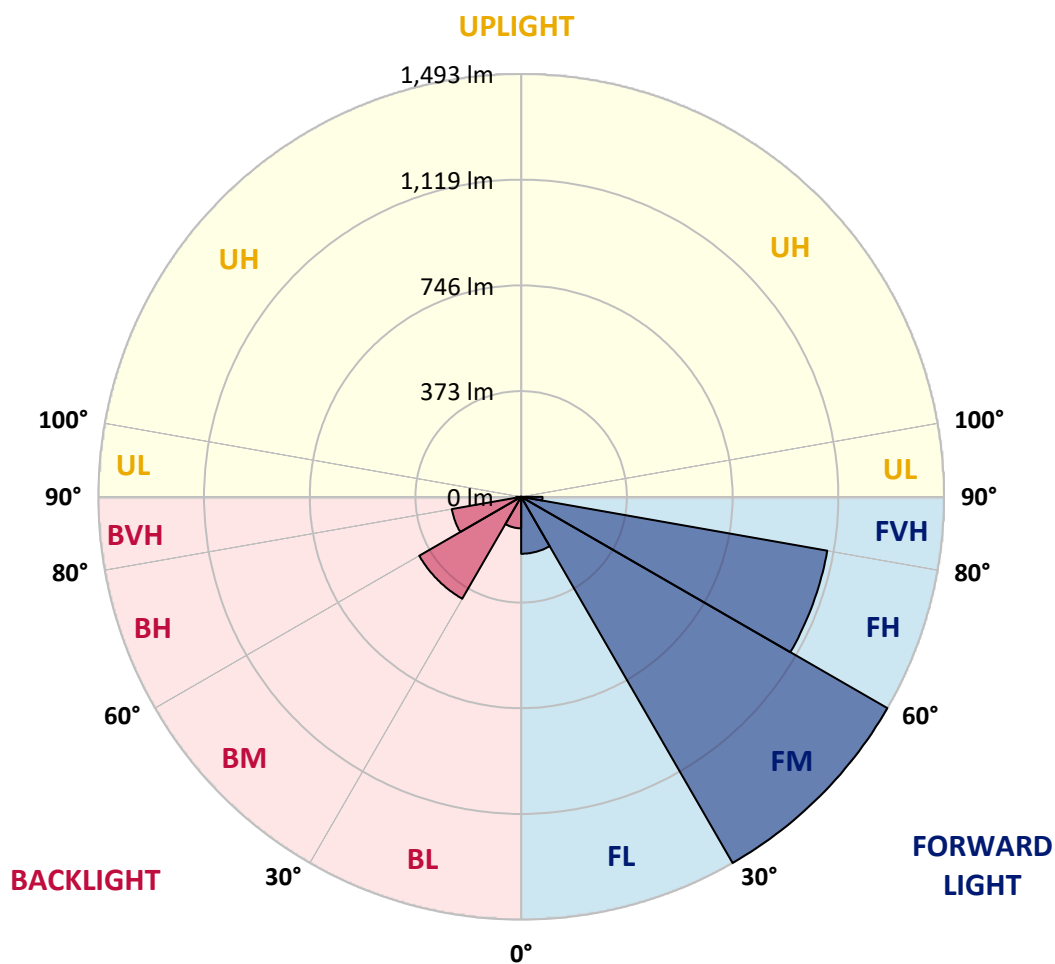
CATALOG NUMBER: TPTN-VA2-750-U-DL-CG-GM

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	201.1	5.5			
FM	(30°-60°)	1492.6	40.8			
FH	(60°-80°)	1097.0	30.0			G1/1800
FVH	(80°-90°)	75.1	2.1			G1/100
BL	(0°-30°)	111.3	3.0	B1/500		
BM	(30°-60°)	415.6	11.4	B1/1000		
BH	(60°-80°)	248.5	6.8	B1/500		G1/500
BVH	(80°-90°)	16.7	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: P1445251

CATALOG NUMBER: TPTN-VA2-750-U-DL-CG-GM

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	287.3	287.3	287.3	287.3	287.3	287.3	287.3	287.3	287.3	287.3	287.3
2.5°	290.9	290.2	290.2	289.5	288.7	288.7	288.0	287.3	285.8	284.4	282.9
5°	304.7	303.3	300.4	297.5	294.6	294.6	293.1	292.4	290.9	290.2	288.7
7.5°	290.9	290.9	289.5	285.8	281.5	280.7	274.2	272.0	274.2	273.5	274.2
10°	297.5	296.7	288.7	279.3	268.4	266.2	260.4	258.2	262.6	266.9	270.6
12.5°	320.0	320.0	311.3	298.9	287.3	284.4	272.0	267.7	268.4	273.5	277.8
15°	357.1	357.1	350.6	340.4	329.5	323.7	304.7	292.4	288.7	290.9	295.3
17.5°	413.8	410.9	414.6	400.0	385.5	380.4	350.6	328.0	318.6	319.3	320.7
20°	501.1	499.7	499.7	490.2	464.8	454.6	414.6	374.6	357.8	355.7	354.2
22.5°	612.4	608.8	610.2	598.6	567.3	558.6	496.8	440.8	406.6	396.4	395.7
25°	740.4	741.1	742.6	726.6	689.5	681.5	599.3	517.9	464.0	444.4	439.3
27.5°	869.9	869.9	861.1	837.9	811.0	797.1	707.7	602.9	528.0	498.9	485.1
30°	986.2	985.5	966.6	932.4	904.8	895.3	796.4	683.0	589.1	545.5	528.0
32.5°	1099.0	1096.8	1063.3	1033.5	1013.9	999.3	892.4	760.0	648.0	589.9	568.0
35°	1213.9	1200.8	1162.3	1137.5	1116.4	1099.7	993.5	838.6	706.2	637.1	609.5
37.5°	1315.0	1311.4	1266.3	1247.4	1223.3	1214.6	1101.9	919.3	768.0	684.4	654.6
40°	1413.9	1412.5	1376.8	1357.9	1336.8	1324.4	1216.8	1007.3	835.7	736.0	702.6
42.5°	1502.6	1505.5	1486.6	1474.3	1456.1	1446.6	1333.9	1099.7	901.1	784.8	749.1
45°	1602.3	1603.0	1599.4	1594.3	1577.6	1578.3	1459.7	1197.9	974.6	837.9	797.9
47.5°	1693.9	1699.7	1708.5	1709.2	1707.7	1700.5	1593.6	1291.7	1043.7	885.9	843.7
50°	1759.4	1768.8	1800.8	1811.0	1808.1	1805.9	1700.5	1387.0	1099.0	928.1	875.7
52.5°	1821.9	1829.2	1875.8	1908.5	1907.8	1902.7	1801.6	1469.9	1152.8	957.9	905.5
55°	1852.5	1856.8	1917.2	1969.6	1979.0	1979.8	1893.2	1530.3	1183.3	976.8	920.8
57.5°	1832.1	1842.3	1911.4	1973.2	2003.8	1997.2	1920.1	1554.3	1180.4	964.4	910.6
60°	1784.8	1799.4	1865.6	1936.1	1975.4	1965.9	1893.9	1544.8	1154.3	933.1	888.1
62.5°	1712.8	1731.0	1795.7	1864.1	1910.7	1913.6	1845.9	1516.5	1105.5	894.6	852.4
65°	1574.6	1598.6	1694.7	1769.6	1813.9	1824.8	1751.4	1448.8	1042.2	836.4	786.2
67.5°	1423.4	1439.4	1516.5	1626.3	1649.6	1664.8	1621.9	1336.8	960.1	744.8	705.5
70°	1251.0	1275.7	1336.8	1444.5	1475.0	1485.9	1460.5	1198.6	842.2	643.7	621.9
72.5°	1058.2	1068.4	1137.5	1218.3	1264.8	1278.6	1251.7	1039.3	712.8	536.8	520.0
75°	829.9	845.9	899.0	979.0	1029.9	1026.2	1021.9	851.0	564.4	427.7	410.9
77.5°	616.0	624.8	676.4	734.6	776.0	779.7	778.2	648.8	423.3	311.3	299.7
80°	402.2	413.1	450.9	496.8	524.4	536.8	532.4	452.4	290.2	209.5	200.7
82.5°	227.7	230.6	258.9	283.7	317.8	315.7	324.4	275.7	176.7	122.9	112.0
85°	80.7	85.8	100.4	126.6	140.4	149.8	151.3	129.5	79.3	55.3	41.5
87.5°	8.0	8.0	13.8	20.4	26.2	27.6	28.4	29.1	23.3	18.2	5.8
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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CATALOG NUMBER: TPTN-VA2-750-U-DL-CG-GM

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	287.3	287.3	287.3	287.3	287.3	287.3	287.3	287.3	287.3	287.3	287.3
2.5°	282.9	281.5	278.6	275.7	274.9	272.0	271.3	270.6	269.1	269.1	268.4
5°	285.8	284.4	280.0	274.9	269.8	265.5	261.8	258.2	255.3	253.1	253.1
7.5°	275.7	276.4	276.4	272.7	265.5	257.5	248.0	240.7	234.2	231.3	229.8
10°	271.3	273.5	272.7	269.1	261.8	250.9	238.6	226.9	217.5	211.6	210.9
12.5°	279.3	279.3	277.1	271.3	261.1	247.3	232.7	217.5	206.6	200.0	199.3
15°	296.7	296.0	288.0	277.1	262.6	246.6	229.8	213.1	199.3	192.0	191.3
17.5°	321.5	317.8	304.7	285.8	266.2	246.6	227.7	209.5	194.9	186.2	184.7
20°	352.0	344.7	324.4	296.7	270.6	248.0	226.2	206.6	192.0	182.6	181.8
22.5°	389.8	378.2	346.2	309.1	277.8	250.9	226.2	205.1	191.3	184.0	184.0
25°	427.7	411.7	370.9	322.9	285.1	253.1	226.2	206.6	194.9	189.8	189.1
27.5°	469.1	446.6	394.9	338.9	292.4	256.0	227.7	207.3	198.6	194.9	194.9
30°	506.9	481.5	419.7	354.2	300.4	259.7	230.6	209.5	200.7	199.3	197.8
32.5°	542.6	512.8	442.9	368.8	309.8	263.3	232.7	211.6	203.6	202.2	201.5
35°	581.9	549.1	464.0	382.6	317.1	269.1	235.7	215.3	207.3	205.8	205.8
37.5°	624.0	583.3	488.8	397.1	324.4	274.9	238.6	220.4	212.4	210.9	210.2
40°	664.8	619.7	513.5	411.7	333.1	279.3	242.2	224.7	218.2	216.7	216.0
42.5°	708.4	656.8	537.5	424.8	341.8	283.7	247.3	231.3	225.5	222.6	221.8
45°	748.4	692.4	559.3	438.6	349.8	288.7	253.1	239.3	233.5	230.6	229.8
47.5°	787.0	723.0	579.7	448.8	356.4	292.4	258.9	245.8	241.5	238.6	237.1
50°	818.2	747.7	594.2	455.3	360.7	294.6	263.3	251.7	248.0	243.7	242.9
52.5°	840.8	767.3	604.4	460.4	361.5	294.6	266.2	258.2	253.8	249.5	248.0
55°	851.7	774.6	603.7	458.2	357.1	292.4	266.2	259.7	256.0	250.9	250.2
57.5°	844.4	764.4	589.9	445.8	346.9	284.4	261.8	255.3	251.7	247.3	247.3
60°	821.9	743.3	568.0	426.9	330.9	271.3	252.4	247.3	243.7	240.0	240.0
62.5°	786.2	712.8	540.4	398.6	311.3	256.0	240.0	235.7	233.5	229.8	229.1
65°	724.4	653.1	501.1	368.8	285.1	236.4	222.6	221.1	218.2	213.1	212.4
67.5°	653.1	587.7	443.7	331.7	254.6	211.6	201.5	200.0	197.1	192.7	193.5
70°	573.1	514.9	384.0	285.8	217.5	184.7	176.0	173.8	171.6	170.9	170.2
72.5°	482.9	433.5	321.5	233.5	181.8	155.6	148.4	146.9	145.5	144.7	144.0
75°	375.3	341.8	256.7	184.0	144.0	125.1	118.6	117.8	117.8	116.4	114.9
77.5°	276.4	248.7	186.9	133.8	104.0	90.9	88.7	88.7	89.5	88.7	86.6
80°	183.3	165.8	122.2	88.7	69.1	60.4	60.4	61.1	61.8	61.1	61.8
82.5°	97.5	91.6	69.1	51.6	40.7	35.6	36.4	37.1	38.5	37.1	38.5
85°	35.6	36.4	30.5	23.3	19.6	18.2	18.9	19.6	20.4	19.6	19.6
87.5°	2.2	7.3	12.4	10.9	9.5	9.5	9.5	9.5	9.5	8.7	8.0
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: SP1-2411-284-3

Test Date: 11/21/2024

Luminaire Tested: TTN-D0-750-U-WQ

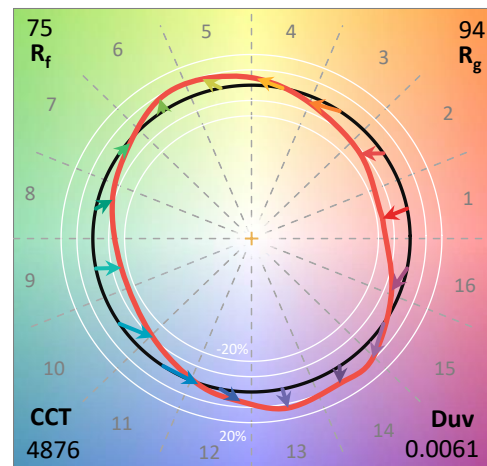
Data in this report applies to families of products including TTN-D0-750-U-WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2411-284-3
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 11/21/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **TTN-D0-750-U-WQ**
 Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE. 5000K, 70 CRI LEDS AND WIDE DISTRIBUTION

Spectral Parameters

CCT (K):	4876	CRI (Ra):	72.6		
CIE u':	0.2086	R1:	69.5	R9:	-24.6
CIE v':	0.4932	R2:	77.0	R10:	44.8
Duv:	0.0061	R3:	82.2	R11:	68.2
CIE x:	0.3502	R4:	72.6	R12:	36.1
CIE y:	0.3680	R5:	69.3	R13:	70.5
CIE z:	0.2818	R6:	67.6	R14:	89.9
Peak Wavelength (nm):	451	R7:	83.7	R15:	63.1
Dominant Wavelength (nm):	569	R8:	58.6		
Purity:	15.51324				
Rf:	74.6				
Rg:	94.4				



Test Conditions

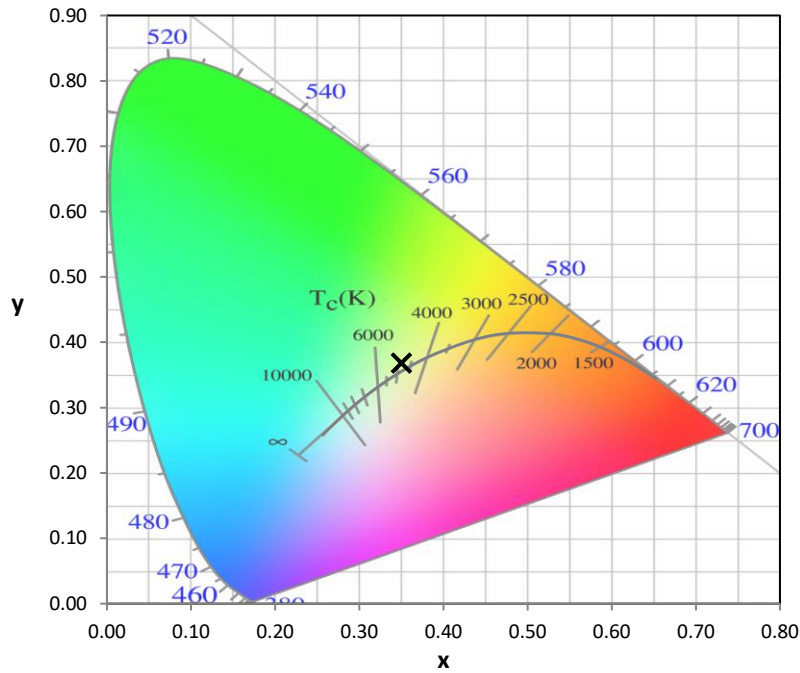
Stabilization Time: 51M
 Operation Time: 1H 51M
 Sphere Temperature (°C): 24.9

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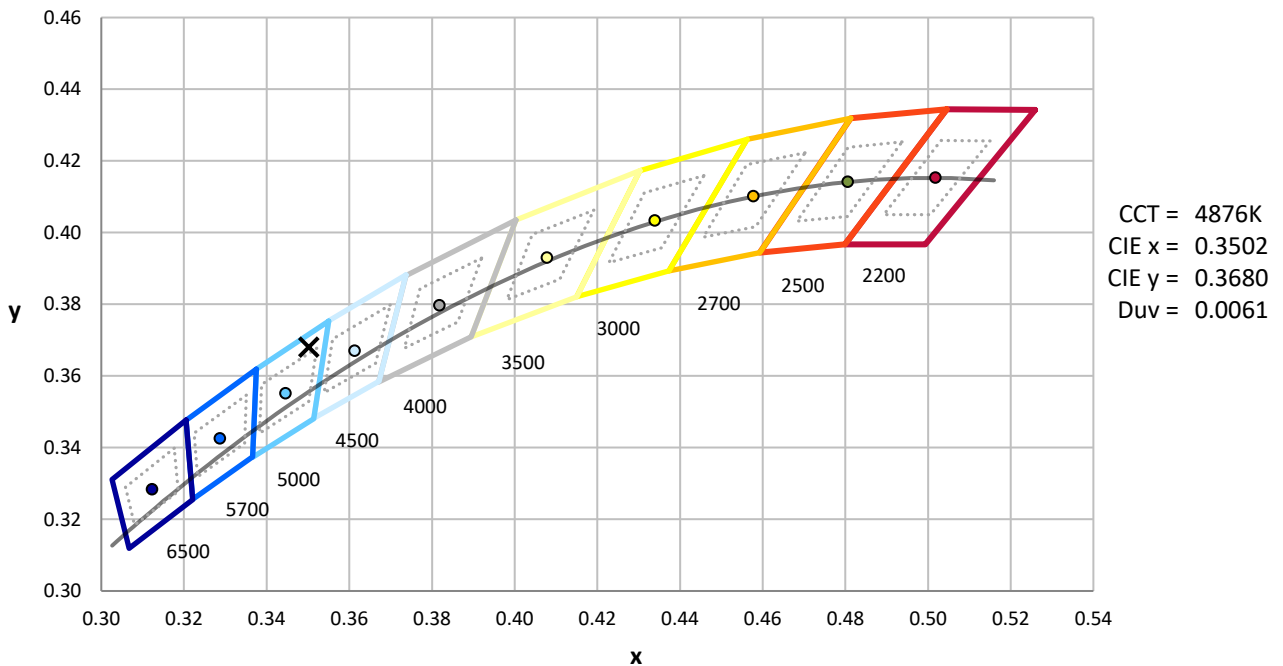
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



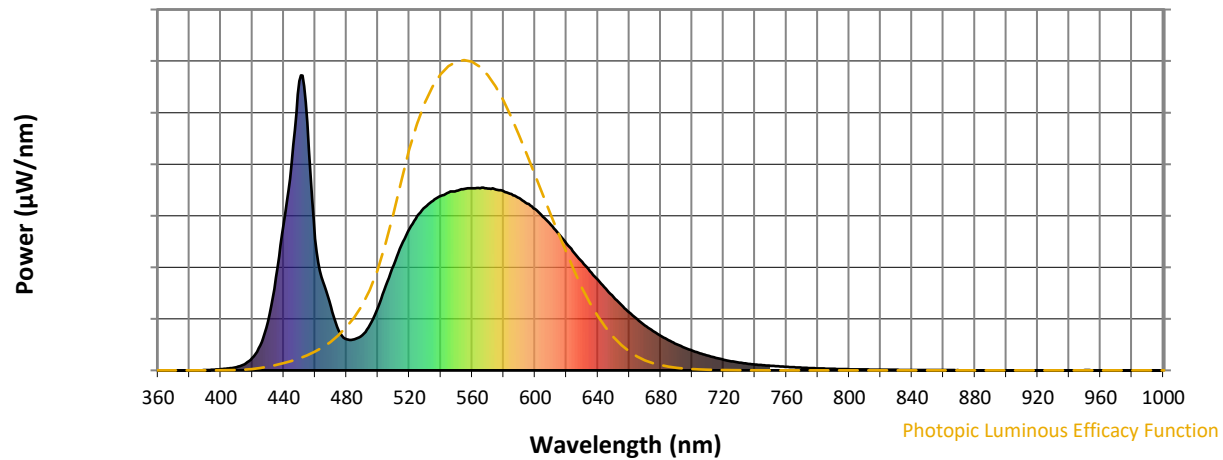
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 7-step quadrangle

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Photopic Flux vs. Wavelength

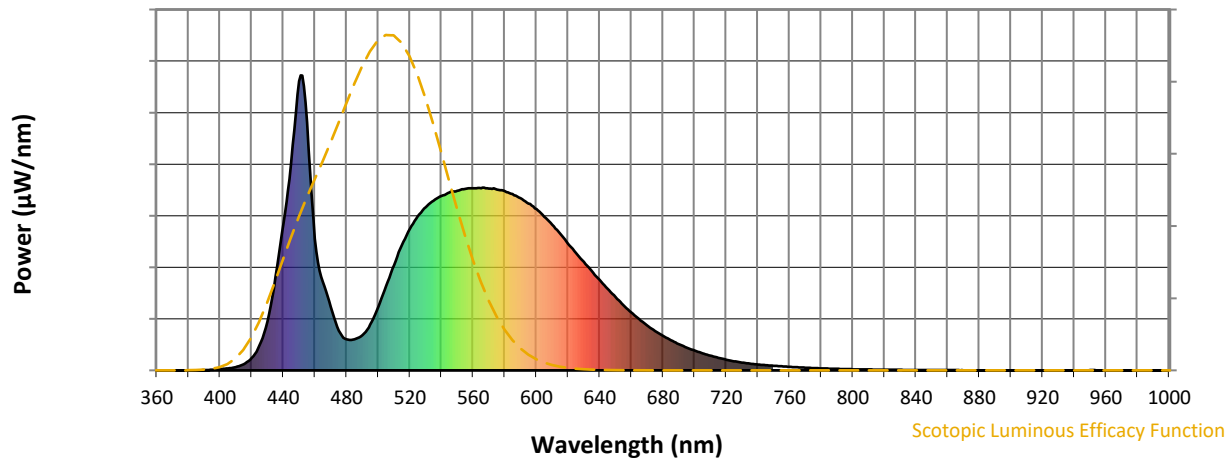


Photopic Lumens: NR

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	430	NR	750	16	NR	880	0	NR
365	0	NR	495	156	NR	625	398	NR	755	14	NR	885	0	NR
370	0	NR	500	214	NR	630	368	NR	760	12	NR	890	0	NR
375	0	NR	505	286	NR	635	336	NR	765	11	NR	895	0	NR
380	0	NR	510	357	NR	640	306	NR	770	9	NR	900	0	NR
385	0	NR	515	425	NR	645	276	NR	775	8	NR	905	0	NR
390	1	NR	520	480	NR	650	248	NR	780	7	NR	910	0	NR
395	2	NR	525	523	NR	655	221	NR	785	6	NR	915	0	NR
400	4	NR	530	554	NR	660	196	NR	790	5	NR	920	0	NR
405	7	NR	535	575	NR	665	173	NR	795	4	NR	925	0	NR
410	11	NR	540	592	NR	670	152	NR	800	4	NR	930	0	NR
415	21	NR	545	603	NR	675	133	NR	805	3	NR	935	0	NR
420	42	NR	550	609	NR	680	117	NR	810	3	NR	940	0	NR
425	85	NR	555	615	NR	685	102	NR	815	3	NR	945	0	NR
430	165	NR	560	617	NR	690	89	NR	820	2	NR	950	1	NR
435	316	NR	565	617	NR	695	77	NR	825	2	NR	955	0	NR
440	497	NR	570	616	NR	700	67	NR	830	2	NR	960	0	NR
445	702	NR	575	613	NR	705	58	NR	835	2	NR	965	0	NR
450	981	NR	580	607	NR	710	50	NR	840	1	NR	970	0	NR
455	840	NR	585	598	NR	715	43	NR	845	1	NR	975	0	NR
460	446	NR	590	583	NR	720	36	NR	850	1	NR	980	0	NR
465	300	NR	595	566	NR	725	31	NR	855	1	NR	985	0	NR
470	215	NR	600	546	NR	730	26	NR	860	1	NR	990	0	NR
475	135	NR	605	521	NR	735	23	NR	865	1	NR	995	0	NR
480	105	NR	610	494	NR	740	20	NR	870	1	NR	1000	0	NR
485	106	NR	615	463	NR	745	18	NR	875	0	NR			

REPORT NUMBER: SP1-2411-284-3

Scotopic Flux vs. Wavelength



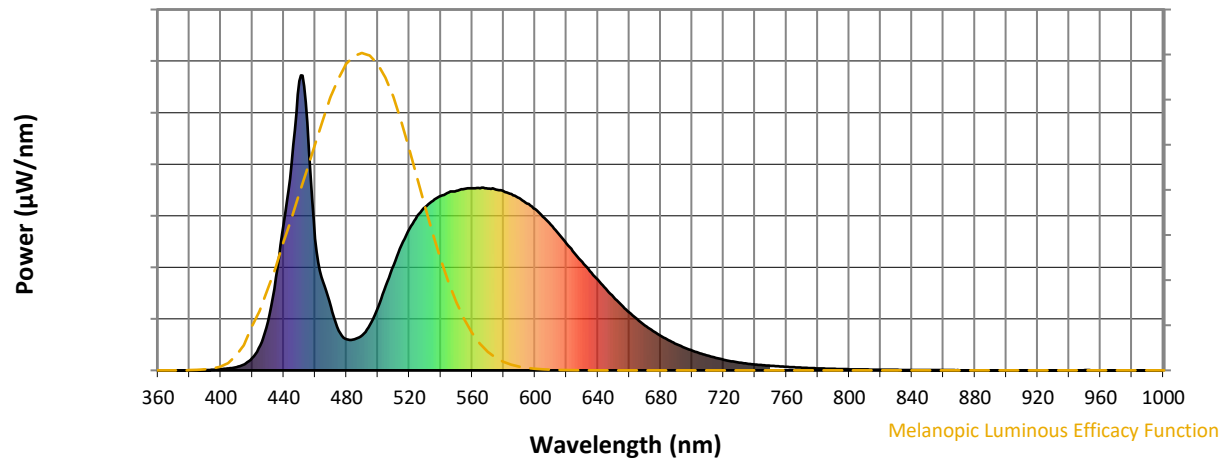
Scotopic Lumens: NR

S/P: 1.74

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	430	NR	750	16	NR	880	0	NR
365	0	NR	495	156	NR	625	398	NR	755	14	NR	885	0	NR
370	0	NR	500	214	NR	630	368	NR	760	12	NR	890	0	NR
375	0	NR	505	286	NR	635	336	NR	765	11	NR	895	0	NR
380	0	NR	510	357	NR	640	306	NR	770	9	NR	900	0	NR
385	0	NR	515	425	NR	645	276	NR	775	8	NR	905	0	NR
390	1	NR	520	480	NR	650	248	NR	780	7	NR	910	0	NR
395	2	NR	525	523	NR	655	221	NR	785	6	NR	915	0	NR
400	4	NR	530	554	NR	660	196	NR	790	5	NR	920	0	NR
405	7	NR	535	575	NR	665	173	NR	795	4	NR	925	0	NR
410	11	NR	540	592	NR	670	152	NR	800	4	NR	930	0	NR
415	21	NR	545	603	NR	675	133	NR	805	3	NR	935	0	NR
420	42	NR	550	609	NR	680	117	NR	810	3	NR	940	0	NR
425	85	NR	555	615	NR	685	102	NR	815	3	NR	945	0	NR
430	165	NR	560	617	NR	690	89	NR	820	2	NR	950	1	NR
435	316	NR	565	617	NR	695	77	NR	825	2	NR	955	0	NR
440	497	NR	570	616	NR	700	67	NR	830	2	NR	960	0	NR
445	702	NR	575	613	NR	705	58	NR	835	2	NR	965	0	NR
450	981	NR	580	607	NR	710	50	NR	840	1	NR	970	0	NR
455	840	NR	585	598	NR	715	43	NR	845	1	NR	975	0	NR
460	446	NR	590	583	NR	720	36	NR	850	1	NR	980	0	NR
465	300	NR	595	566	NR	725	31	NR	855	1	NR	985	0	NR
470	215	NR	600	546	NR	730	26	NR	860	1	NR	990	0	NR
475	135	NR	605	521	NR	735	23	NR	865	1	NR	995	0	NR
480	105	NR	610	494	NR	740	20	NR	870	1	NR	1000	0	NR
485	106	NR	615	463	NR	745	18	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.51

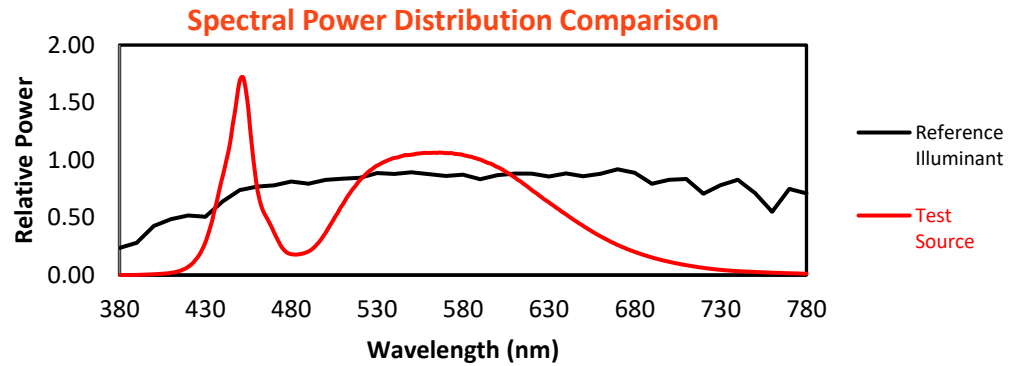
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	119	NR	620	430	NR	750	16	NR	880	0	NR
365	0	NR	495	156	NR	625	398	NR	755	14	NR	885	0	NR
370	0	NR	500	214	NR	630	368	NR	760	12	NR	890	0	NR
375	0	NR	505	286	NR	635	336	NR	765	11	NR	895	0	NR
380	0	NR	510	357	NR	640	306	NR	770	9	NR	900	0	NR
385	0	NR	515	425	NR	645	276	NR	775	8	NR	905	0	NR
390	1	NR	520	480	NR	650	248	NR	780	7	NR	910	0	NR
395	2	NR	525	523	NR	655	221	NR	785	6	NR	915	0	NR
400	4	NR	530	554	NR	660	196	NR	790	5	NR	920	0	NR
405	7	NR	535	575	NR	665	173	NR	795	4	NR	925	0	NR
410	11	NR	540	592	NR	670	152	NR	800	4	NR	930	0	NR
415	21	NR	545	603	NR	675	133	NR	805	3	NR	935	0	NR
420	42	NR	550	609	NR	680	117	NR	810	3	NR	940	0	NR
425	85	NR	555	615	NR	685	102	NR	815	3	NR	945	0	NR
430	165	NR	560	617	NR	690	89	NR	820	2	NR	950	1	NR
435	316	NR	565	617	NR	695	77	NR	825	2	NR	955	0	NR
440	497	NR	570	616	NR	700	67	NR	830	2	NR	960	0	NR
445	702	NR	575	613	NR	705	58	NR	835	2	NR	965	0	NR
450	981	NR	580	607	NR	710	50	NR	840	1	NR	970	0	NR
455	840	NR	585	598	NR	715	43	NR	845	1	NR	975	0	NR
460	446	NR	590	583	NR	720	36	NR	850	1	NR	980	0	NR
465	300	NR	595	566	NR	725	31	NR	855	1	NR	985	0	NR
470	215	NR	600	546	NR	730	26	NR	860	1	NR	990	0	NR
475	135	NR	605	521	NR	735	23	NR	865	1	NR	995	0	NR
480	105	NR	610	494	NR	740	20	NR	870	1	NR	1000	0	NR
485	106	NR	615	463	NR	745	18	NR	875	0	NR			

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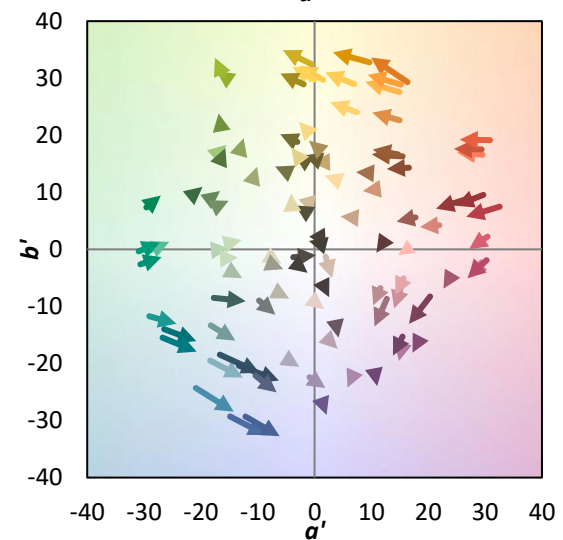
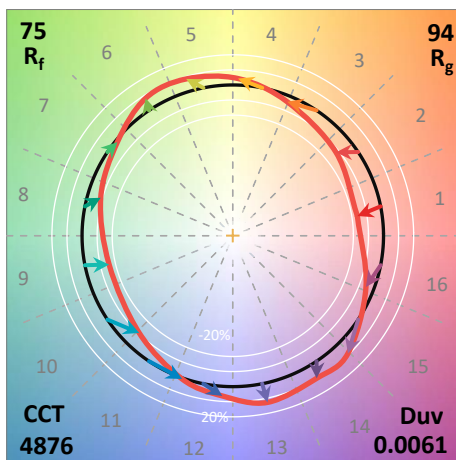
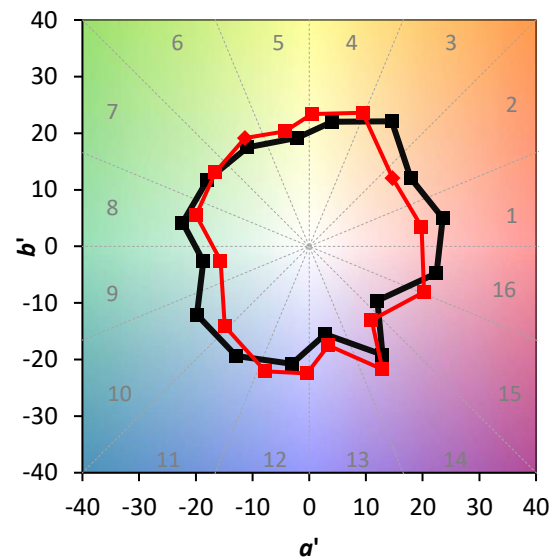
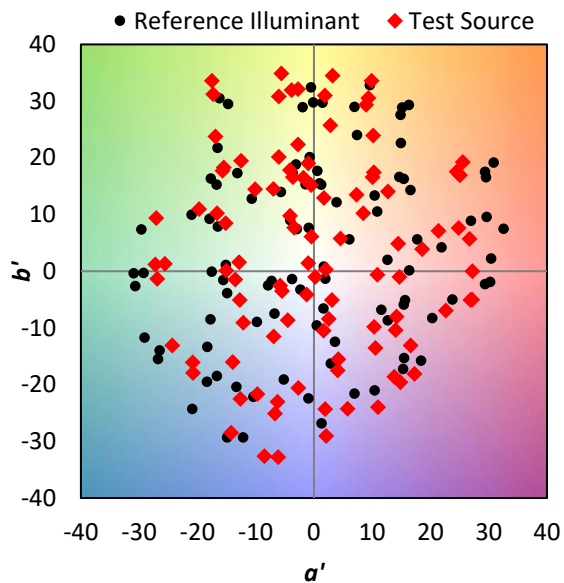
TM-30-18

Summary

$R_f = 74.6$
 $R_g = 94.4$
 $CIE R_a = 72.6$
 $R_g = -24.6$

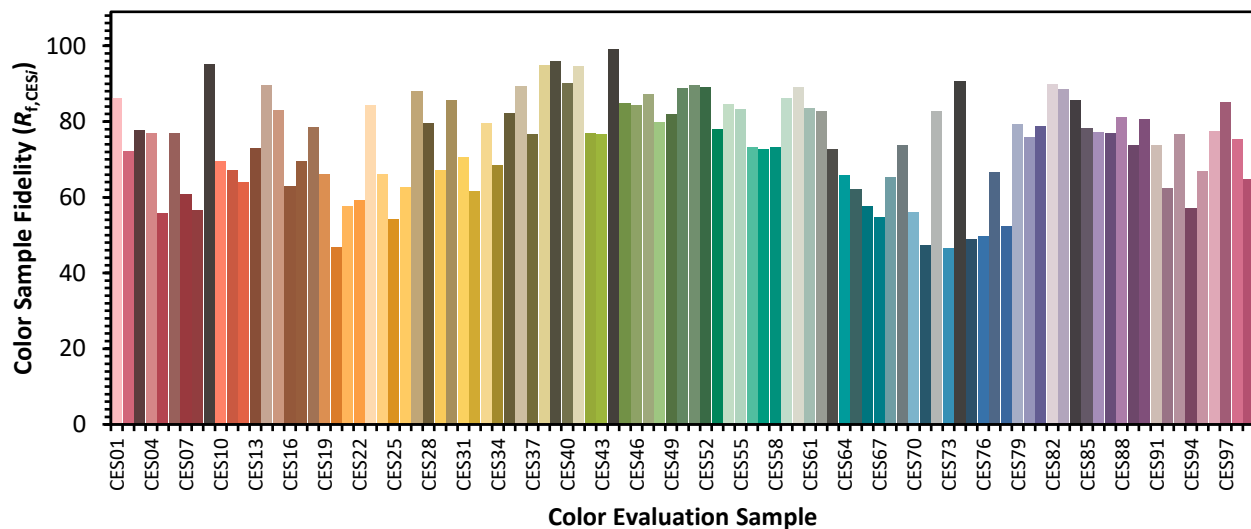


Color Vector Graphics

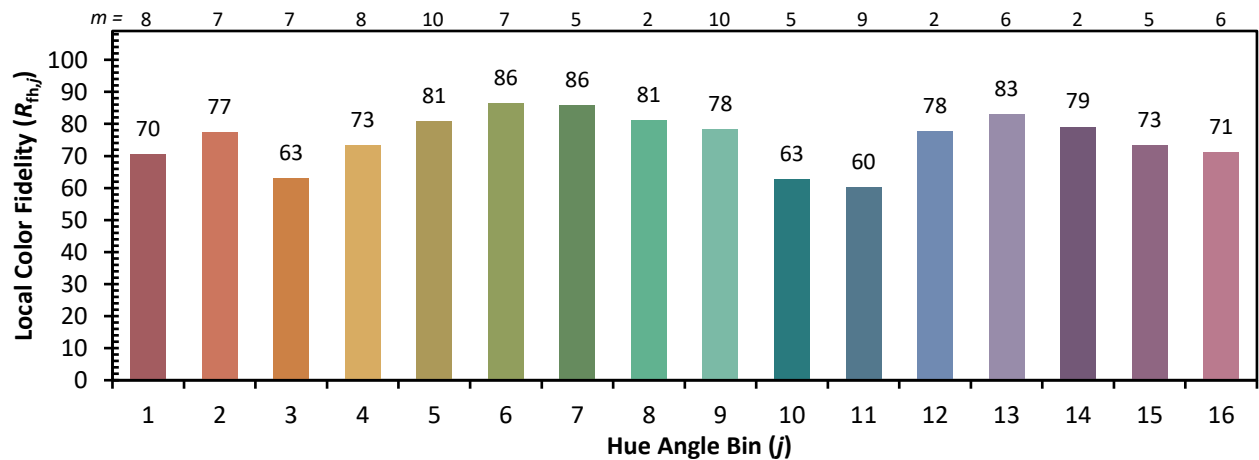
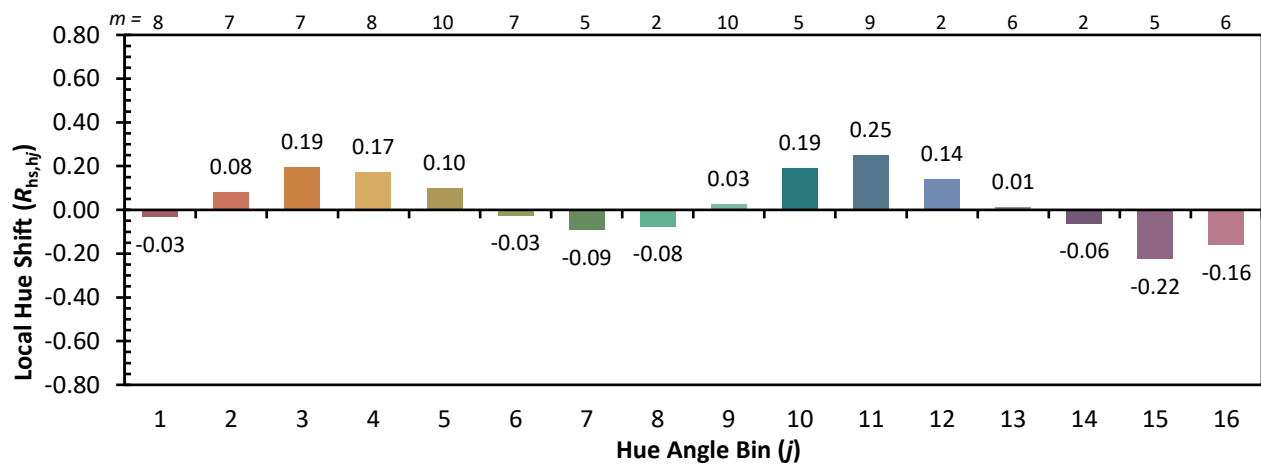
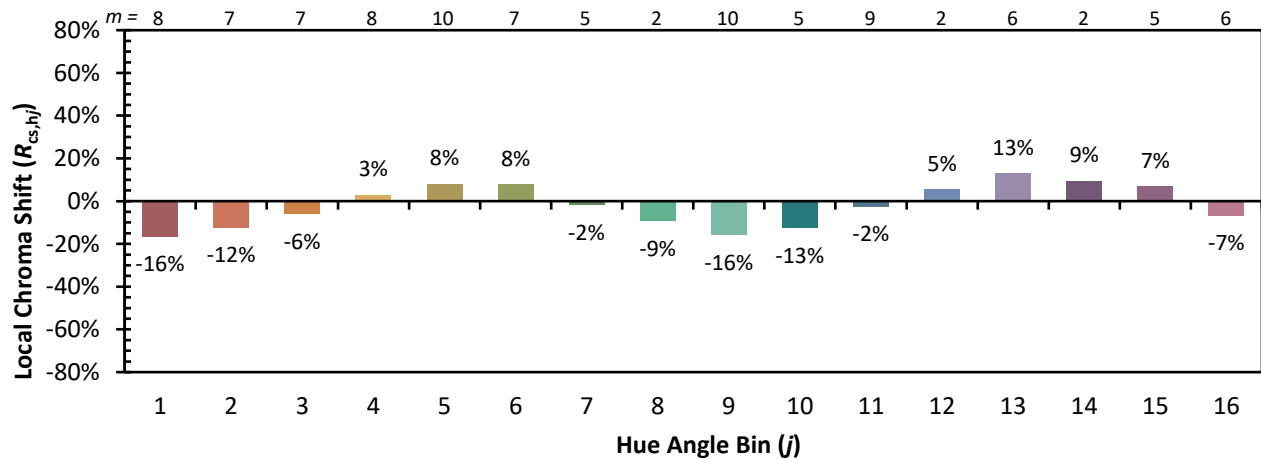


Individual Sample Fidelity Index ($R_{f,i}$)

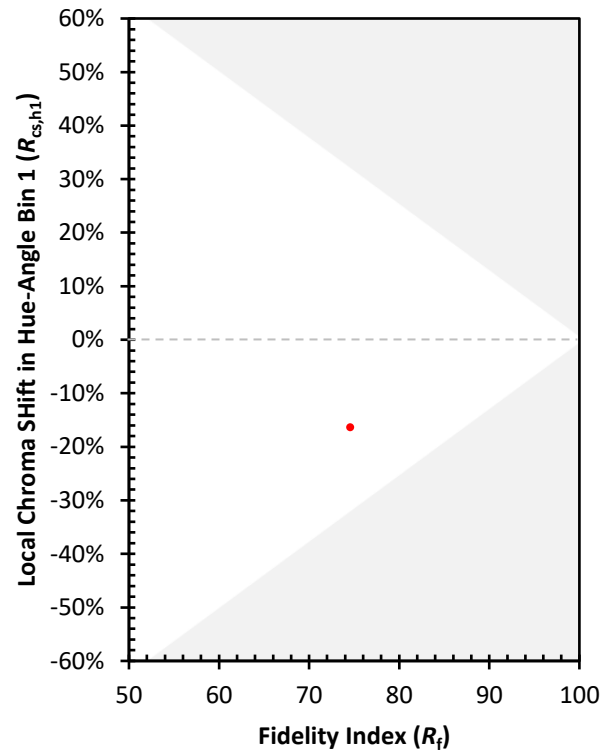
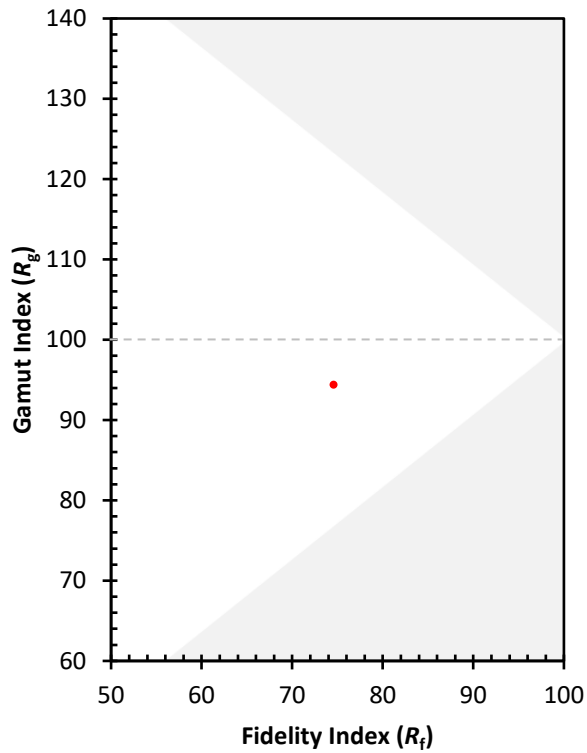
CES01 = 85	CES26 = 63	CES51 = 90	CES76 = 50
CES02 = 59	CES27 = 88	CES52 = 89	CES77 = 67
CES03 = 30	CES28 = 80	CES53 = 78	CES78 = 52
CES04 = 69	CES29 = 67	CES54 = 85	CES79 = 79
CES05 = 46	CES30 = 86	CES55 = 83	CES80 = 76
CES06 = 50	CES31 = 70	CES56 = 73	CES81 = 79
CES07 = 39	CES32 = 62	CES57 = 73	CES82 = 90
CES08 = 38	CES33 = 80	CES58 = 73	CES83 = 89
CES09 = 29	CES34 = 69	CES59 = 86	CES84 = 86
CES10 = 72	CES35 = 82	CES60 = 89	CES85 = 78
CES11 = 55	CES36 = 89	CES61 = 83	CES86 = 77
CES12 = 61	CES37 = 77	CES62 = 83	CES87 = 77
CES13 = 41	CES38 = 95	CES63 = 73	CES88 = 81
CES14 = 74	CES39 = 96	CES64 = 66	CES89 = 74
CES15 = 70	CES40 = 90	CES65 = 62	CES90 = 81
CES16 = 46	CES41 = 95	CES66 = 58	CES91 = 74
CES17 = 49	CES42 = 77	CES67 = 55	CES92 = 62
CES18 = 55	CES43 = 77	CES68 = 65	CES93 = 77
CES19 = 71	CES44 = 99	CES69 = 74	CES94 = 57
CES20 = 64	CES45 = 85	CES70 = 56	CES95 = 67
CES21 = 85	CES46 = 84	CES71 = 47	CES96 = 77
CES22 = 77	CES47 = 87	CES72 = 83	CES97 = 85
CES23 = 91	CES48 = 80	CES73 = 46	CES98 = 75
CES24 = 90	CES49 = 82	CES74 = 91	CES99 = 65
CES25 = 71	CES50 = 89	CES75 = 49	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)