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: P833572

Luminaire Tested: **TTN-D2-740-U-WQ-CG-UPL1**

Issue Date: 5/15/2024

Report Generated By 670246001

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

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P833572
	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-D2-740-U-WQ-CG-UPL1
Description:	TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
	4000K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5344.9 lumens
Efficiency:	N/A
Efficacy:	118.5 lumens/watt
Luminous Opening:	Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification:	Type V - Short
BUG Rating:	B2 - U3 - G1

Input Watts (W):	45.1
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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REPORT NUMBER: P833572
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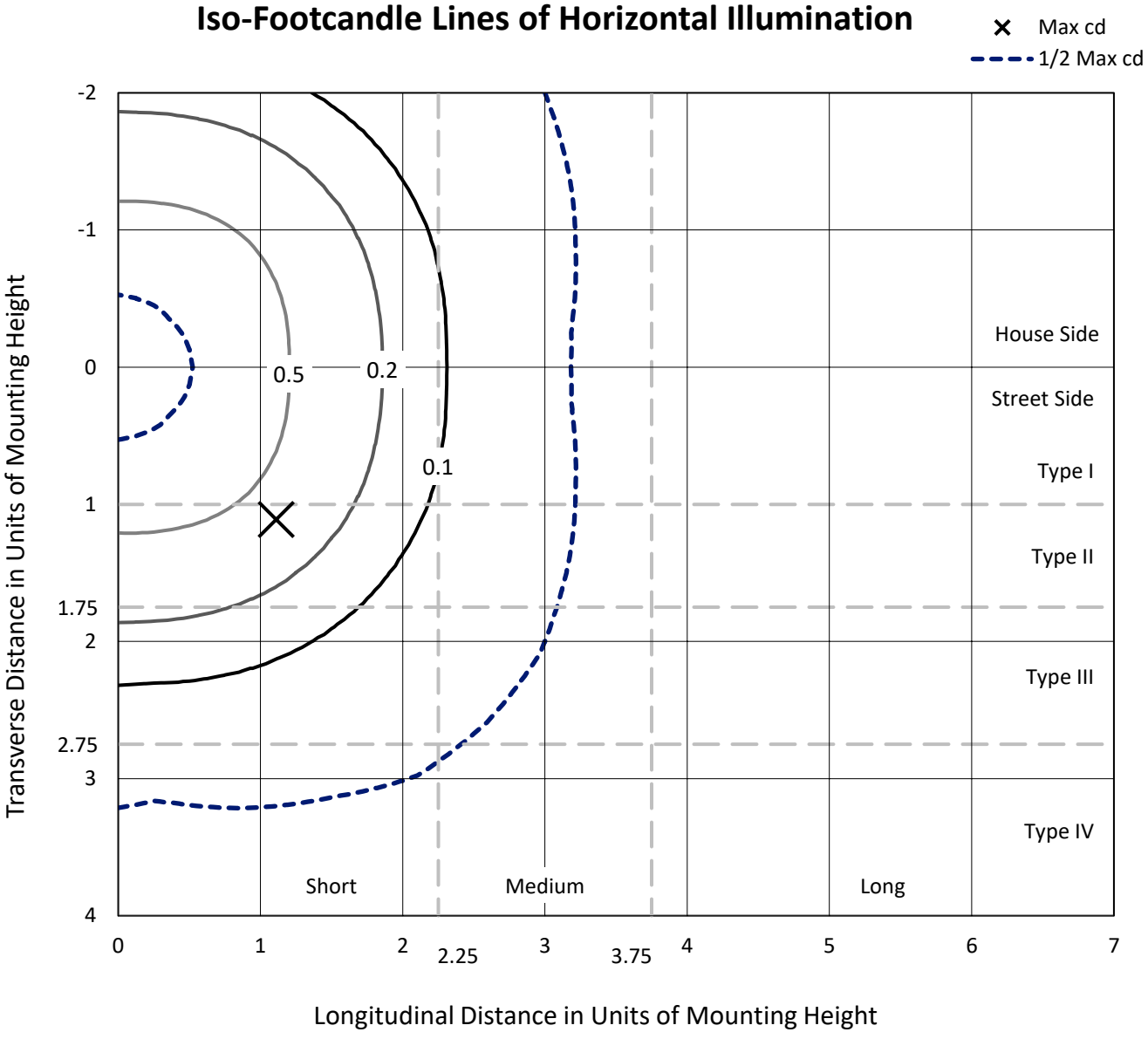
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
Type V - Short - N/A

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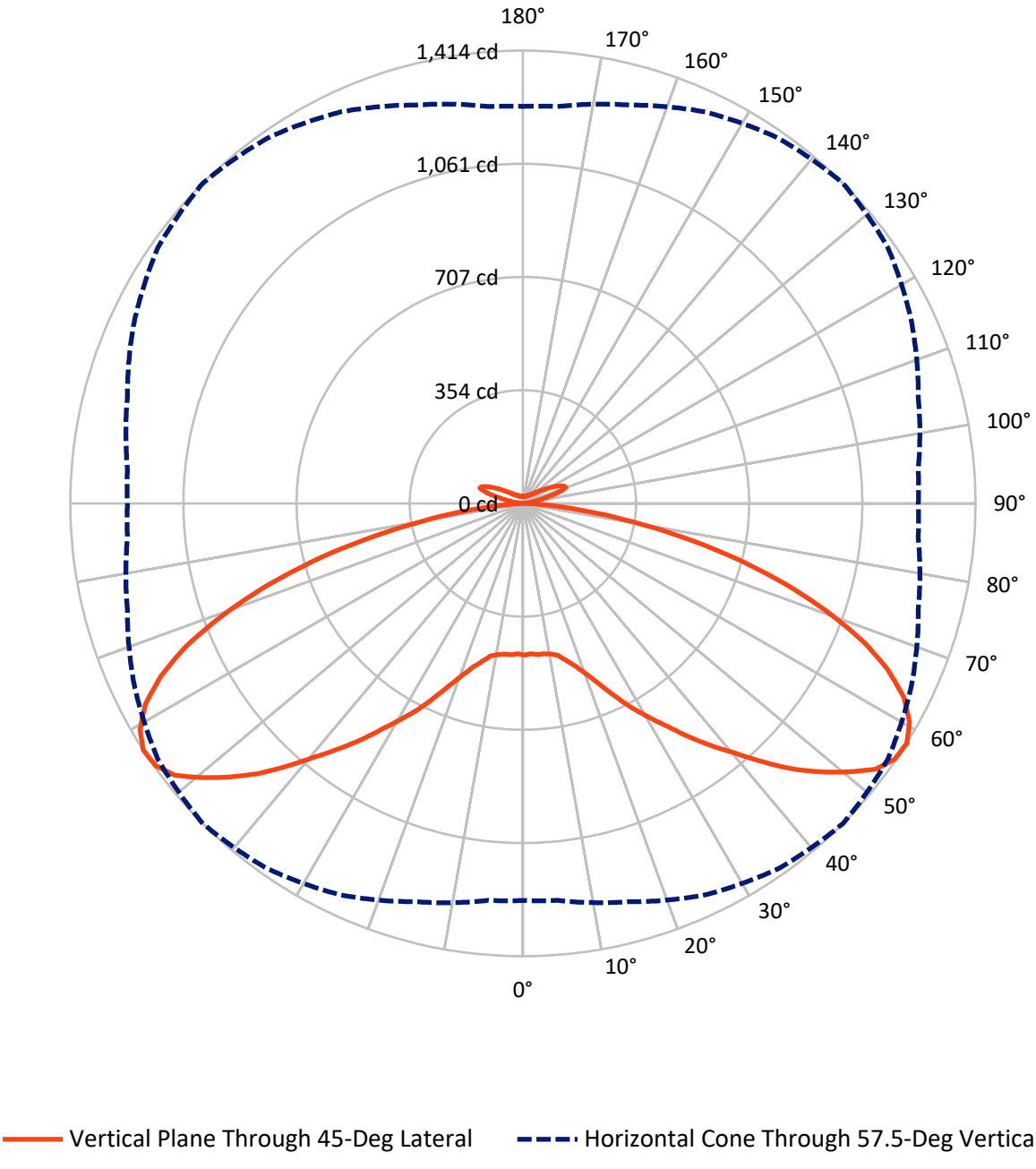
Luminous Intensity Polar Plot



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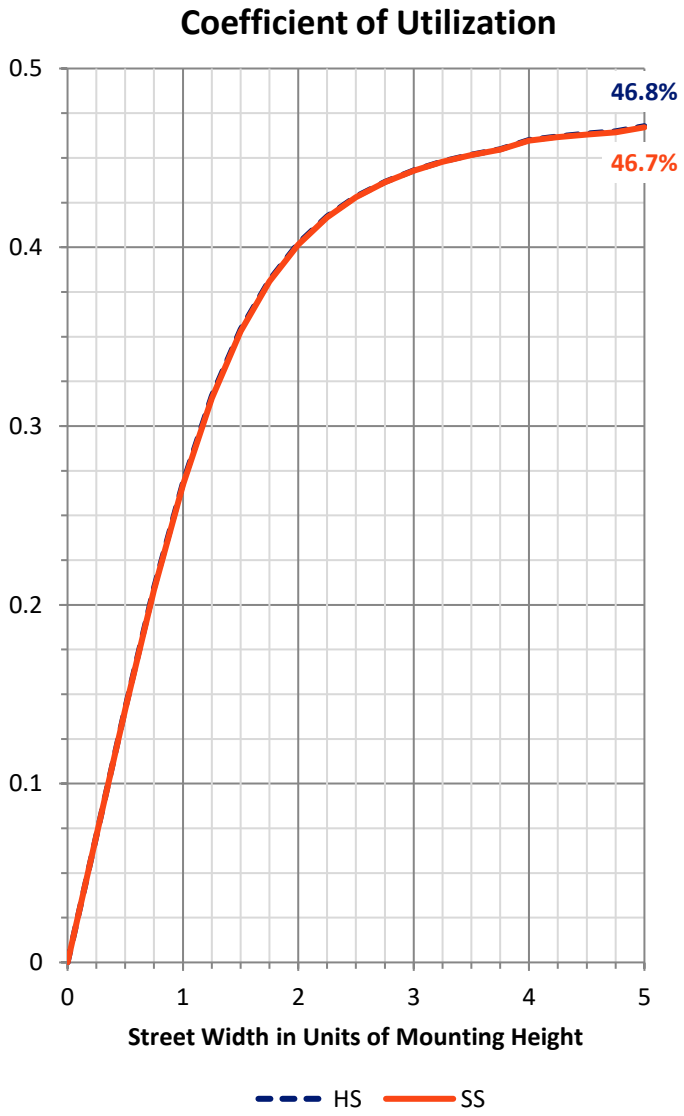
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2510.7	161.7	2672.4
	% Fixture	47.0	3.0	50.0
Street Side	Lumens	2510.7	161.7	2672.4
	% Fixture	47.0	3.0	50.0
Total	Lumens	5021.4	323.4	5344.9
	% Fixture	93.9	6.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	0.8
10°-20°	146.3	2.7
20°-30°	307.7	5.8
30°-40°	554.7	10.4
40°-50°	881.8	16.5
50°-60°	1176.5	22.0
60°-70°	1136.7	21.3
70°-80°	658.7	12.3
80°-90°	114.0	2.1
90°-100°	7.2	0.1
100°-110°	73.4	1.4
110°-120°	107.3	2.0
120°-130°	62.3	1.2
130°-140°	33.0	0.6
140°-150°	19.6	0.4
150°-160°	12.1	0.2
160°-170°	6.6	0.1
170°-180°	2.1	0.0
0°-90°	5021.4	93.9
0°-180°	5344.9	100.0



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REPORT NUMBER: P833572
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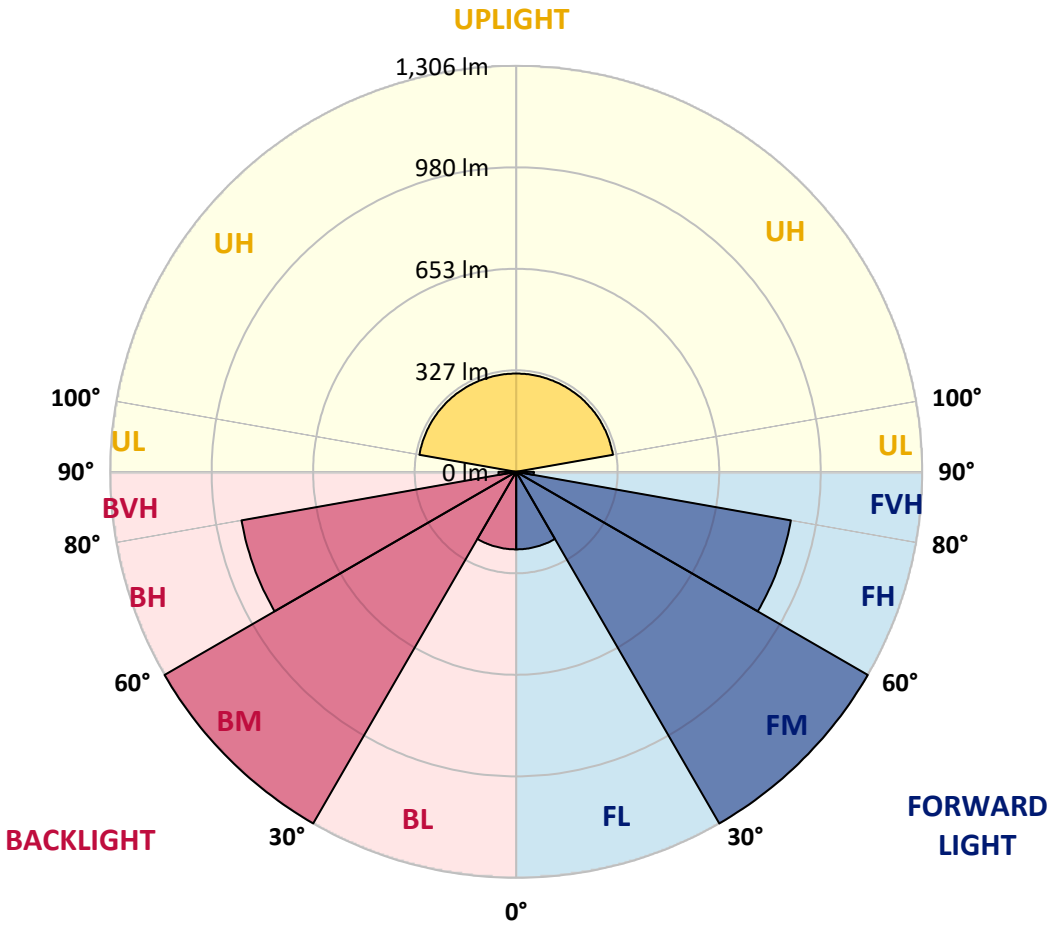
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	249.6	4.7			
FM	(30°-60°)	1306.5	24.4			
FH	(60°-80°)	897.7	16.8			G1/1800
FVH	(80°-90°)	57.0	1.1			G1/100
BL	(0°-30°)	249.6	4.7	B1/500		
BM	(30°-60°)	1306.5	24.4	B2/2500		
BH	(60°-80°)	897.7	16.8	B2/1000		G1/1800
BVH	(80°-90°)	57.0	1.1			G1/100
UL	(90°-100°)	7.2	0.1		U1/10	
UH	(100°-180°)	316.2	5.9		U3/500	

BUG Rating: B2-U3-G1
Type V Short



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REPORT NUMBER: P833572
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3
2.5°	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0
5°	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3
7.5°	470.0	470.0	474.3	474.3	474.3	474.3	474.3	474.3	474.3	470.0	470.0
10°	474.3	474.3	474.3	478.7	478.7	478.7	478.7	478.7	474.3	474.3	474.3
12.5°	483.0	483.0	487.4	487.4	487.4	487.4	487.4	487.4	487.4	483.0	483.0
15°	504.8	504.8	504.8	509.1	509.1	509.1	509.1	509.1	504.8	504.8	504.8
17.5°	526.5	526.5	530.9	530.9	535.2	535.2	535.2	530.9	530.9	530.9	530.9
20°	557.0	557.0	561.4	561.4	565.7	570.1	570.1	565.7	561.4	561.4	561.4
22.5°	596.2	600.5	600.5	600.5	604.9	613.6	609.2	604.9	600.5	600.5	600.5
25°	644.0	648.4	652.7	652.7	657.1	665.8	665.8	652.7	652.7	652.7	652.7
27.5°	700.6	705.0	709.3	709.3	713.7	722.4	718.0	709.3	709.3	705.0	705.0
30°	752.8	757.2	761.5	765.9	770.2	774.6	774.6	765.9	761.5	757.2	752.8
32.5°	805.0	805.0	813.7	822.4	831.1	831.1	835.5	822.4	813.7	805.0	800.7
35°	857.3	861.6	866.0	879.0	892.1	896.4	892.1	879.0	866.0	857.3	857.3
37.5°	913.8	918.2	922.5	939.9	953.0	961.7	953.0	939.9	922.5	913.8	909.5
40°	974.7	979.1	983.5	1005.2	1018.3	1027.0	1013.9	1000.9	983.5	974.7	970.4
42.5°	1031.3	1040.0	1048.7	1074.8	1096.6	1105.3	1092.2	1070.5	1053.1	1031.3	1027.0
45°	1100.9	1109.6	1122.7	1148.8	1170.6	1183.6	1166.2	1144.5	1118.4	1100.9	1096.6
47.5°	1157.5	1166.2	1179.3	1214.1	1244.5	1253.2	1235.8	1209.7	1174.9	1153.2	1148.8
50°	1201.0	1209.7	1235.8	1275.0	1309.8	1318.5	1301.1	1266.3	1227.1	1196.7	1192.3
52.5°	1235.8	1244.5	1275.0	1327.2	1366.4	1379.4	1357.7	1318.5	1266.3	1231.5	1227.1
55°	1253.2	1257.6	1296.8	1353.3	1392.5	1409.9	1388.1	1344.6	1288.1	1248.9	1244.5
57.5°	1240.2	1244.5	1288.1	1349.0	1392.5	1414.3	1392.5	1340.3	1279.4	1240.2	1235.8
60°	1214.1	1214.1	1253.2	1322.9	1375.1	1388.1	1366.4	1314.2	1248.9	1209.7	1205.4
62.5°	1166.2	1161.9	1209.7	1270.7	1322.9	1335.9	1318.5	1266.3	1201.0	1161.9	1157.5
65°	1074.8	1066.1	1135.8	1192.3	1240.2	1253.2	1240.2	1192.3	1131.4	1070.5	1061.8
67.5°	966.0	953.0	1018.3	1083.5	1127.1	1144.5	1127.1	1087.9	1018.3	957.3	953.0
70°	852.9	839.9	892.1	948.6	996.5	1005.2	987.8	948.6	883.4	844.2	844.2
72.5°	718.0	705.0	752.8	796.3	844.2	852.9	835.5	800.7	752.8	713.7	709.3
75°	570.1	557.0	600.5	635.3	683.2	687.5	678.8	639.7	600.5	561.4	561.4
77.5°	422.1	409.0	443.9	474.3	513.5	513.5	509.1	478.7	443.9	417.7	417.7
80°	278.5	269.8	300.3	313.3	348.1	348.1	343.8	322.0	295.9	278.5	274.1
82.5°	156.7	148.0	174.1	178.4	204.5	204.5	200.2	182.8	165.4	152.3	152.3
85°	60.9	52.2	69.6	74.0	87.0	87.0	82.7	78.3	65.3	56.6	56.6
87.5°	4.4	4.4	8.7	8.7	13.1	13.1	13.1	8.7	8.7	4.4	4.4
90°	2.8	2.8	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.8	2.8
92.5°	2.8	2.8	2.8	3.9	4.4	3.9	4.4	3.3	3.3	2.8	2.8
95°	3.3	3.3	3.9	5.0	6.1	6.6	6.6	3.9	3.9	3.3	3.3
97.5°	4.4	5.0	5.0	6.1	10.0	18.3	11.1	5.5	5.5	5.0	4.4
100°	7.2	7.7	7.7	13.8	29.3	39.3	28.2	14.4	10.5	7.7	7.7
102.5°	23.2	24.3	29.9	44.8	66.4	60.3	50.9	48.1	33.2	26.6	25.5
105°	59.2	58.7	63.1	74.7	93.0	91.3	84.1	76.4	65.8	60.9	60.9
107.5°	78.0	78.0	81.9	91.9	105.7	123.4	125.1	99.0	86.9	81.3	80.8
110°	88.0	88.0	91.3	99.6	117.9	142.8	141.6	122.3	107.3	100.2	99.0

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REPORT NUMBER: P833572
CATALOG NUMBER: TTN-D2-740-U-WQ-CG-UPL1

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	90.2	90.7	95.2	107.9	127.8	*138.9*	133.9	126.2	119.5	114.0	112.9
115°	93.5	93.5	98.5	110.7	121.7	*126.2*	120.6	114.5	110.1	107.9	109.0
117.5°	92.4	94.1	95.2	101.8	109.0	*112.3*	109.6	101.3	97.9	96.8	95.2
120°	85.8	85.8	86.9	90.2	94.1	*95.7*	94.6	89.1	86.3	85.8	84.7
122.5°	76.4	76.9	76.4	78.0	80.8	*82.4*	81.3	76.9	75.8	75.8	74.7
125°	67.0	67.0	66.4	67.5	69.2	*68.6*	69.2	67.0	66.4	66.4	65.8
127.5°	60.3	59.8	58.7	59.2	59.8	*59.8*	60.3	58.1	58.7	59.2	58.7
130°	53.7	53.7	52.6	52.6	52.6	*51.5*	52.6	51.5	52.0	52.6	53.1
132.5°	47.6	47.6	45.9	45.4	45.4	*45.4*	45.9	45.4	46.5	47.6	47.6
135°	42.6	42.6	40.9	41.5	41.5	*40.9*	41.5	40.9	42.1	42.6	42.6
137.5°	38.7	38.7	37.6	37.6	37.6	*37.1*	37.6	37.6	38.2	39.3	39.8
140°	35.4	35.4	34.9	34.9	34.3	*34.9*	34.9	34.9	35.4	36.0	36.0
142.5°	33.8	33.2	32.6	32.1	32.6	*32.6*	32.6	32.1	32.6	33.8	33.8
145°	31.0	31.0	30.4	30.4	30.4	*31.0*	30.4	30.4	31.0	31.0	31.5
147.5°	29.3	29.3	28.8	29.3	29.3	*29.3*	29.3	28.8	29.3	29.3	29.9
150°	28.8	28.2	27.7	28.2	28.2	*27.7*	27.7	27.7	27.7	28.2	28.2
152.5°	27.1	27.1	26.6	27.1	26.6	*26.6*	26.6	26.6	26.6	27.1	27.7
155°	26.0	26.0	25.5	26.0	26.0	*26.0*	26.0	26.0	26.0	26.0	26.0
157.5°	24.9	25.5	24.9	24.9	24.9	*24.9*	24.9	24.9	24.9	25.5	25.5
160°	24.3	24.3	24.3	24.3	23.8	*23.8*	23.8	24.3	24.3	24.3	24.9
162.5°	23.8	23.8	23.8	23.8	23.2	*23.2*	23.2	23.2	23.8	23.8	24.3
165°	23.8	23.2	23.2	23.2	22.7	*22.7*	22.7	22.7	23.2	23.8	23.2
167.5°	22.7	22.7	22.7	22.7	22.7	*22.1*	22.1	22.7	22.7	22.7	23.2
170°	22.7	22.7	22.1	22.1	22.1	*22.1*	22.1	22.1	22.1	22.1	22.7
172.5°	22.7	22.7	22.7	22.7	22.1	*22.1*	22.1	22.1	22.1	22.7	22.7
175°	22.7	22.7	22.7	22.7	22.1	*22.1*	22.1	22.7	22.7	22.7	22.1
177.5°	22.7	22.7	22.7	22.7	22.1	*22.7*	22.7	22.7	22.7	22.7	22.7
180°	22.7	22.7	22.7	22.7	22.7	*22.7*	22.7	22.7	22.7	22.7	22.7

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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: SP1-2411-284-2

Test Date: 11/20/2024

Luminaire Tested: TTN-D0-740-U-WQ

Data in this report applies to TT and TTN families of products

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

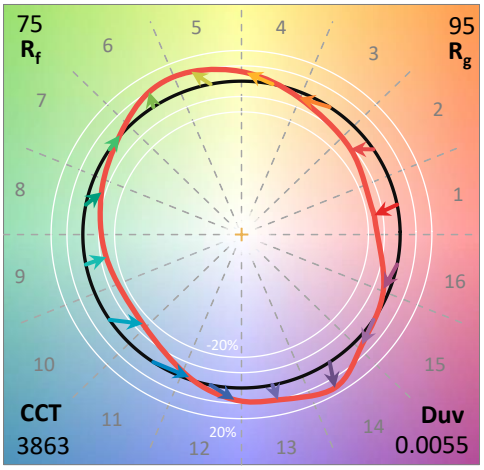
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2411-284-2
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	11/20/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**TTN-D0-740-U-WQ**
Description:	TOPTIER NANO LED PARKING GARAGE LUMINAIRE. 4000K, 70 CRI LEDS AND WIDE DISTRIBUTION

Spectral Parameters

CCT (K):	3863
CIE u':	0.2247
CIE v':	0.5111
Duv:	0.0055
CIE x:	0.3911
CIE y:	0.3954
CIE z:	0.2136
Peak Wavelength (nm):	448
Dominant Wavelength (nm):	577
Purity:	36.03443
Rf:	74.7
Rg:	95.4

CRI (Ra):	71.9
R1:	69.4
R2:	76.9
R3:	83.3
R4:	72.7
R5:	68.4
R6:	67.5
R7:	82.0
R8:	55.3
R9:	-23.5
R10:	45.4
R11:	68.7
R12:	38.7
R13:	70.0
R14:	90.3
R15:	62.1



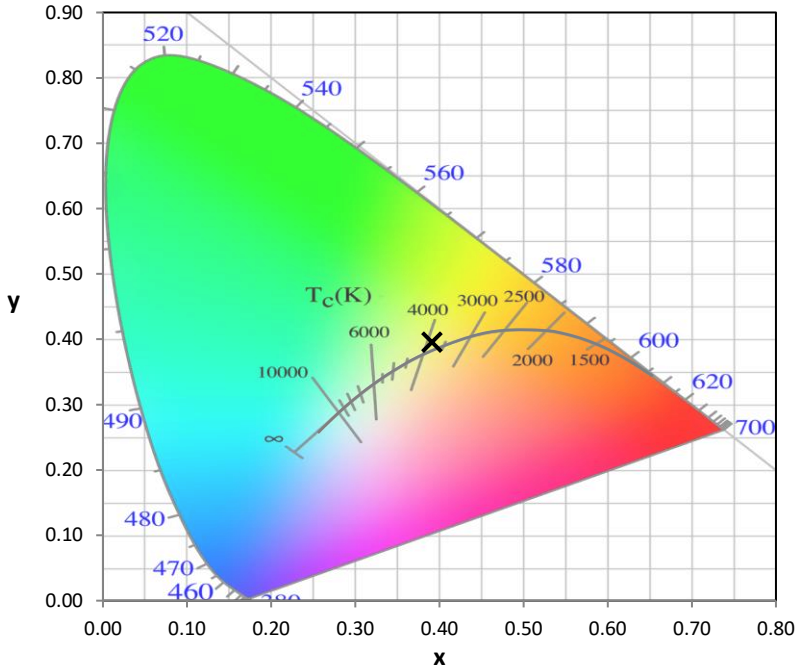
Test Conditions

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

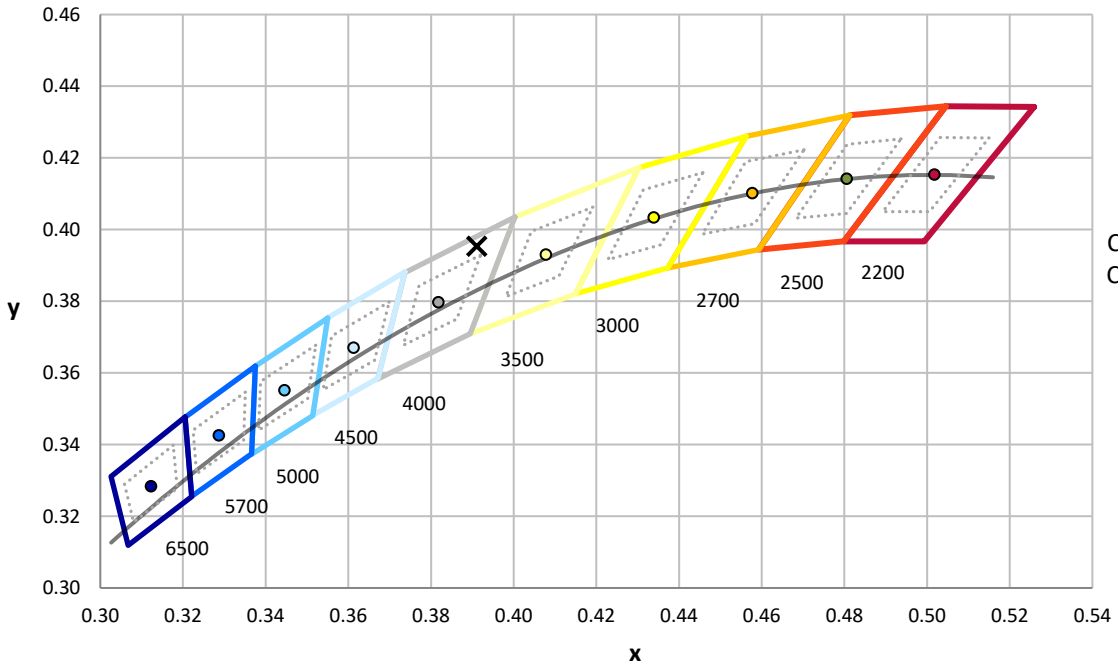
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2411-284-2

CIE 1931 Chromaticity Diagram



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

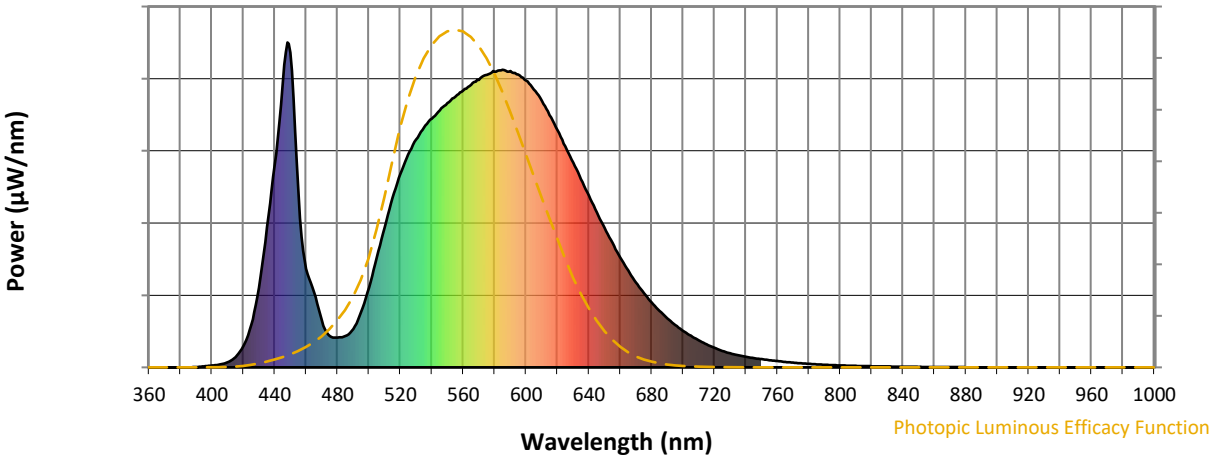


CCT = 3863K
CIE x = 0.3911
CIE y = 0.3954
Duv = 0.0055

Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2411-284-2

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	118	NR	620	730	NR	750	25	NR	880	1	NR
365	0	NR	495	170	NR	625	680	NR	755	22	NR	885	0	NR
370	0	NR	500	245	NR	630	630	NR	760	19	NR	890	0	NR
375	0	NR	505	338	NR	635	579	NR	765	17	NR	895	0	NR
380	0	NR	510	431	NR	640	529	NR	770	14	NR	900	0	NR
385	0	NR	515	521	NR	645	477	NR	775	13	NR	905	0	NR
390	1	NR	520	596	NR	650	429	NR	780	11	NR	910	0	NR
395	3	NR	525	655	NR	655	383	NR	785	9	NR	915	0	NR
400	6	NR	530	701	NR	660	338	NR	790	8	NR	920	0	NR
405	9	NR	535	739	NR	665	298	NR	795	7	NR	925	0	NR
410	16	NR	540	766	NR	670	261	NR	800	6	NR	930	0	NR
415	32	NR	545	791	NR	675	228	NR	805	5	NR	935	0	NR
420	65	NR	550	813	NR	680	200	NR	810	5	NR	940	0	NR
425	131	NR	555	833	NR	685	173	NR	815	4	NR	945	0	NR
430	245	NR	560	852	NR	690	151	NR	820	3	NR	950	0	NR
435	432	NR	565	870	NR	695	130	NR	825	3	NR	955	0	NR
440	622	NR	570	885	NR	700	112	NR	830	3	NR	960	0	NR
445	870	NR	575	900	NR	705	97	NR	835	2	NR	965	0	NR
450	969	NR	580	911	NR	710	83	NR	840	2	NR	970	0	NR
455	544	NR	585	916	NR	715	71	NR	845	2	NR	975	0	NR
460	304	NR	590	912	NR	720	60	NR	850	1	NR	980	0	NR
465	231	NR	595	901	NR	725	51	NR	855	1	NR	985	0	NR
470	142	NR	600	882	NR	730	43	NR	860	1	NR	990	0	NR
475	96	NR	605	855	NR	735	37	NR	865	1	NR	995	0	NR
480	92	NR	610	820	NR	740	32	NR	870	1	NR	1000	0	NR
485	96	NR	615	776	NR	745	29	NR	875	1	NR			

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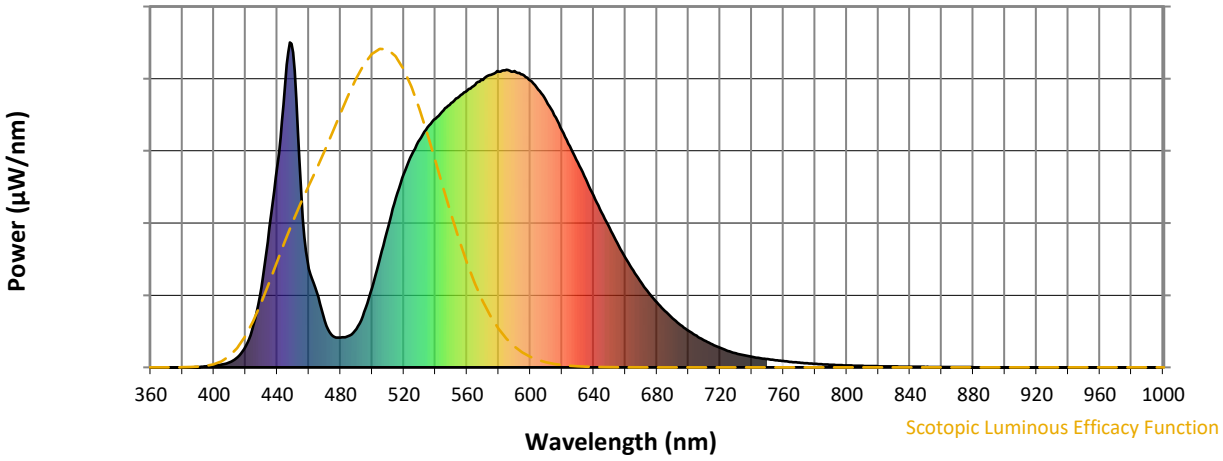
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.45**

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	118	NR	620	730	NR	750	25	NR	880	1	NR
365	0	NR	495	170	NR	625	680	NR	755	22	NR	885	0	NR
370	0	NR	500	245	NR	630	630	NR	760	19	NR	890	0	NR
375	0	NR	505	338	NR	635	579	NR	765	17	NR	895	0	NR
380	0	NR	510	431	NR	640	529	NR	770	14	NR	900	0	NR
385	0	NR	515	521	NR	645	477	NR	775	13	NR	905	0	NR
390	1	NR	520	596	NR	650	429	NR	780	11	NR	910	0	NR
395	3	NR	525	655	NR	655	383	NR	785	9	NR	915	0	NR
400	6	NR	530	701	NR	660	338	NR	790	8	NR	920	0	NR
405	9	NR	535	739	NR	665	298	NR	795	7	NR	925	0	NR
410	16	NR	540	766	NR	670	261	NR	800	6	NR	930	0	NR
415	32	NR	545	791	NR	675	228	NR	805	5	NR	935	0	NR
420	65	NR	550	813	NR	680	200	NR	810	5	NR	940	0	NR
425	131	NR	555	833	NR	685	173	NR	815	4	NR	945	0	NR
430	245	NR	560	852	NR	690	151	NR	820	3	NR	950	0	NR
435	432	NR	565	870	NR	695	130	NR	825	3	NR	955	0	NR
440	622	NR	570	885	NR	700	112	NR	830	3	NR	960	0	NR
445	870	NR	575	900	NR	705	97	NR	835	2	NR	965	0	NR
450	969	NR	580	911	NR	710	83	NR	840	2	NR	970	0	NR
455	544	NR	585	916	NR	715	71	NR	845	2	NR	975	0	NR
460	304	NR	590	912	NR	720	60	NR	850	1	NR	980	0	NR
465	231	NR	595	901	NR	725	51	NR	855	1	NR	985	0	NR
470	142	NR	600	882	NR	730	43	NR	860	1	NR	990	0	NR
475	96	NR	605	855	NR	735	37	NR	865	1	NR	995	0	NR
480	92	NR	610	820	NR	740	32	NR	870	1	NR	1000	0	NR
485	96	NR	615	776	NR	745	29	NR	875	1	NR			

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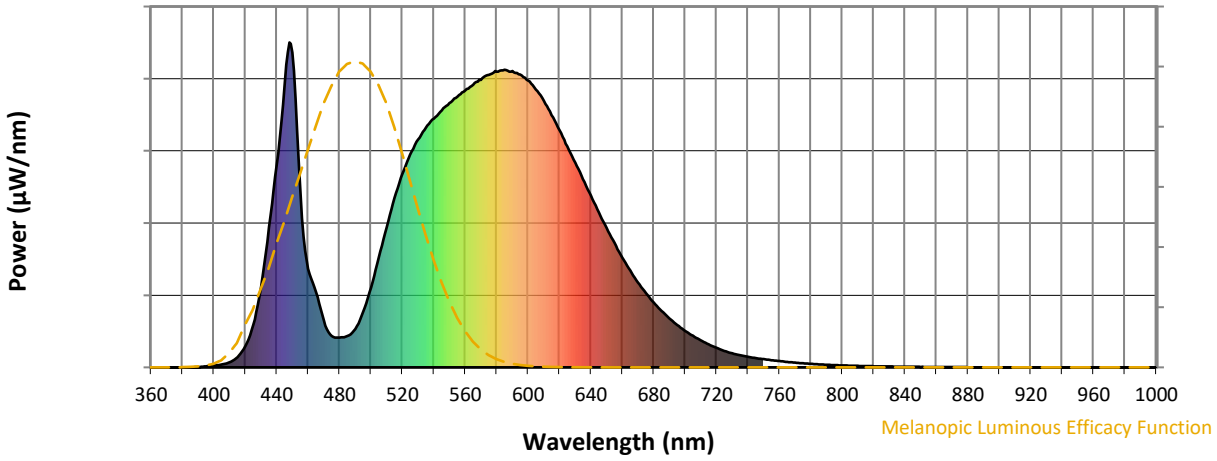
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.72**

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	118	NR	620	730	NR	750	25	NR	880	1	NR
365	0	NR	495	170	NR	625	680	NR	755	22	NR	885	0	NR
370	0	NR	500	245	NR	630	630	NR	760	19	NR	890	0	NR
375	0	NR	505	338	NR	635	579	NR	765	17	NR	895	0	NR
380	0	NR	510	431	NR	640	529	NR	770	14	NR	900	0	NR
385	0	NR	515	521	NR	645	477	NR	775	13	NR	905	0	NR
390	1	NR	520	596	NR	650	429	NR	780	11	NR	910	0	NR
395	3	NR	525	655	NR	655	383	NR	785	9	NR	915	0	NR
400	6	NR	530	701	NR	660	338	NR	790	8	NR	920	0	NR
405	9	NR	535	739	NR	665	298	NR	795	7	NR	925	0	NR
410	16	NR	540	766	NR	670	261	NR	800	6	NR	930	0	NR
415	32	NR	545	791	NR	675	228	NR	805	5	NR	935	0	NR
420	65	NR	550	813	NR	680	200	NR	810	5	NR	940	0	NR
425	131	NR	555	833	NR	685	173	NR	815	4	NR	945	0	NR
430	245	NR	560	852	NR	690	151	NR	820	3	NR	950	0	NR
435	432	NR	565	870	NR	695	130	NR	825	3	NR	955	0	NR
440	622	NR	570	885	NR	700	112	NR	830	3	NR	960	0	NR
445	870	NR	575	900	NR	705	97	NR	835	2	NR	965	0	NR
450	969	NR	580	911	NR	710	83	NR	840	2	NR	970	0	NR
455	544	NR	585	916	NR	715	71	NR	845	2	NR	975	0	NR
460	304	NR	590	912	NR	720	60	NR	850	1	NR	980	0	NR
465	231	NR	595	901	NR	725	51	NR	855	1	NR	985	0	NR
470	142	NR	600	882	NR	730	43	NR	860	1	NR	990	0	NR
475	96	NR	605	855	NR	735	37	NR	865	1	NR	995	0	NR
480	92	NR	610	820	NR	740	32	NR	870	1	NR	1000	0	NR
485	96	NR	615	776	NR	745	29	NR	875	1	NR			

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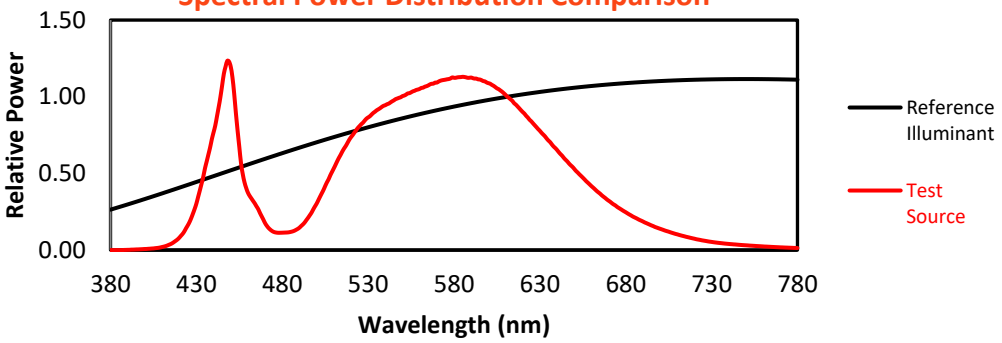
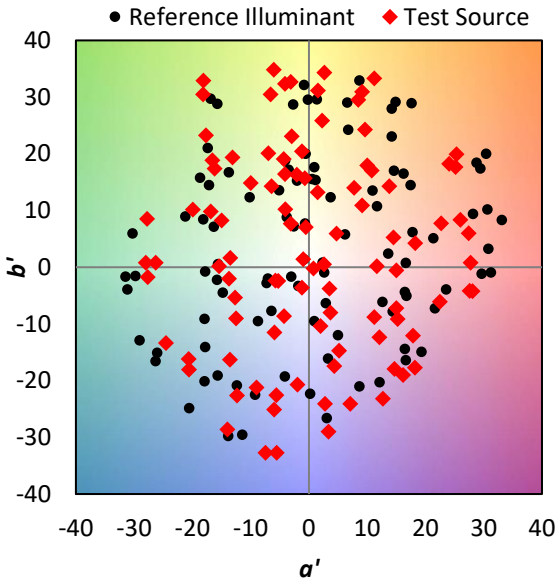
Summary

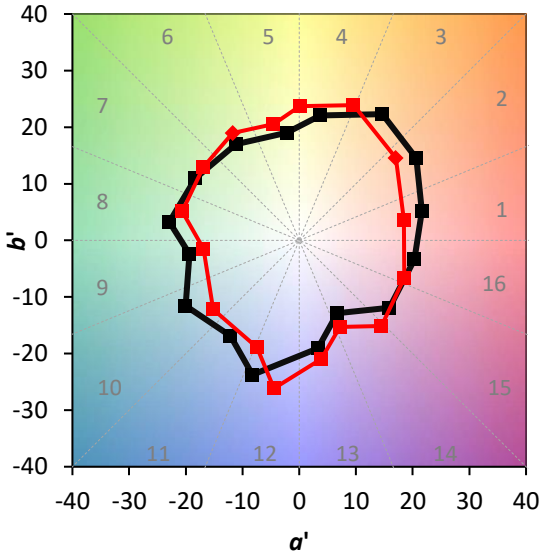
R_f = 74.7
R_g = 95.4
CIE R_a = 71.9
R_9 = -23.5

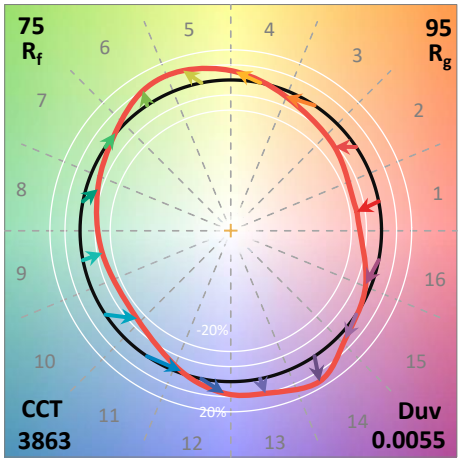
Spectral Power Distribution Comparison

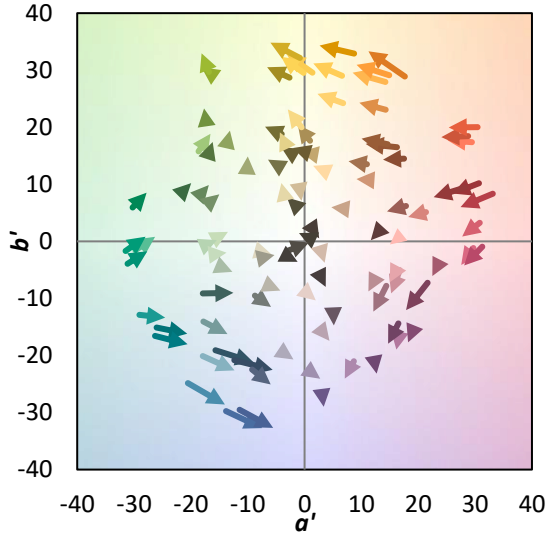


Color Vector Graphics









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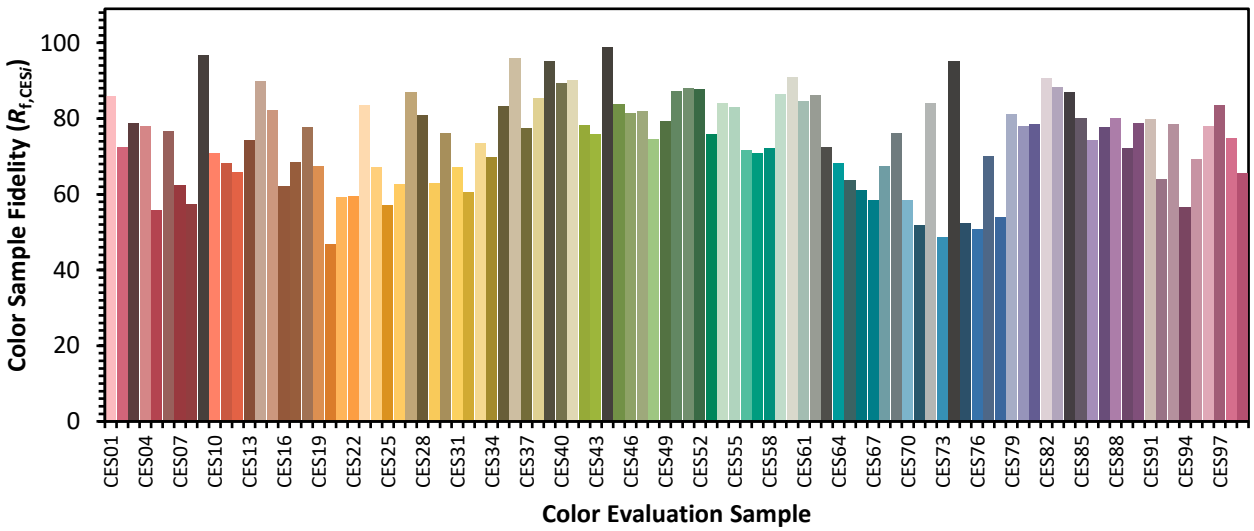
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 63	CES51 = 88	CES76 = 51
CES02 = 61	CES27 = 87	CES52 = 88	CES77 = 70
CES03 = 30	CES28 = 81	CES53 = 76	CES78 = 54
CES04 = 70	CES29 = 63	CES54 = 84	CES79 = 81
CES05 = 47	CES30 = 76	CES55 = 83	CES80 = 78
CES06 = 50	CES31 = 67	CES56 = 72	CES81 = 79
CES07 = 40	CES32 = 61	CES57 = 71	CES82 = 91
CES08 = 39	CES33 = 73	CES58 = 72	CES83 = 88
CES09 = 29	CES34 = 70	CES59 = 86	CES84 = 87
CES10 = 74	CES35 = 83	CES60 = 91	CES85 = 80
CES11 = 57	CES36 = 96	CES61 = 85	CES86 = 74
CES12 = 63	CES37 = 77	CES62 = 86	CES87 = 78
CES13 = 42	CES38 = 85	CES63 = 72	CES88 = 80
CES14 = 74	CES39 = 95	CES64 = 68	CES89 = 72
CES15 = 71	CES40 = 89	CES65 = 64	CES90 = 79
CES16 = 46	CES41 = 90	CES66 = 61	CES91 = 80
CES17 = 49	CES42 = 78	CES67 = 58	CES92 = 64
CES18 = 56	CES43 = 76	CES68 = 67	CES93 = 78
CES19 = 71	CES44 = 99	CES69 = 76	CES94 = 57
CES20 = 65	CES45 = 84	CES70 = 58	CES95 = 69
CES21 = 86	CES46 = 81	CES71 = 52	CES96 = 78
CES22 = 78	CES47 = 82	CES72 = 84	CES97 = 84
CES23 = 92	CES48 = 75	CES73 = 49	CES98 = 75
CES24 = 91	CES49 = 79	CES74 = 95	CES99 = 66
CES25 = 72	CES50 = 87	CES75 = 52	



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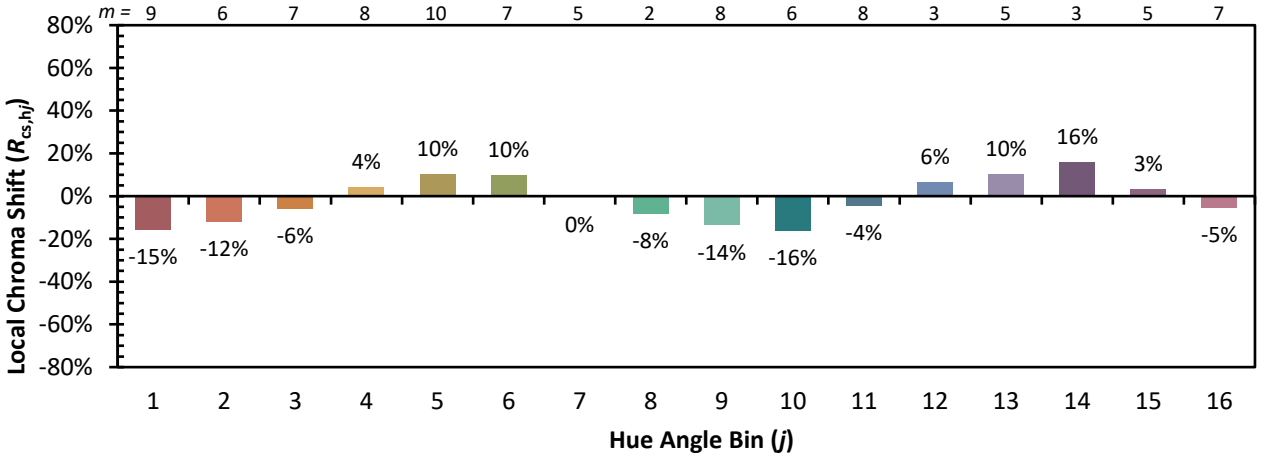
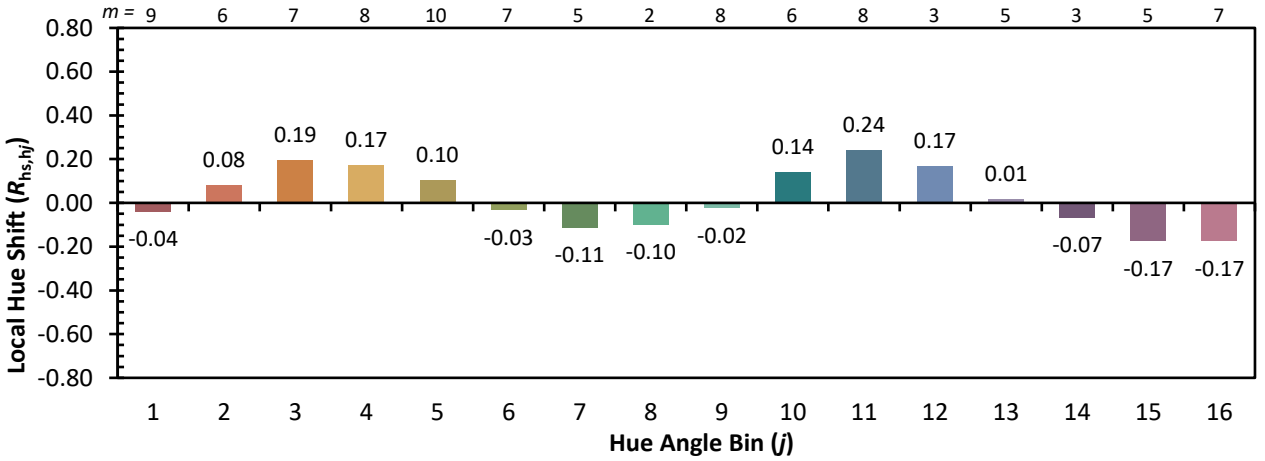
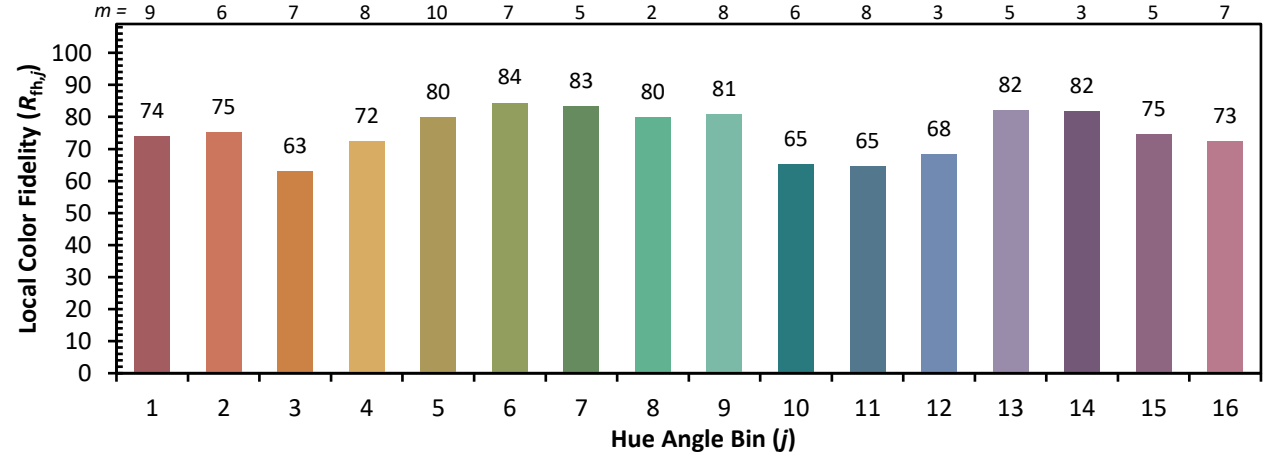
Color Rendition by Hue-Angle Bin







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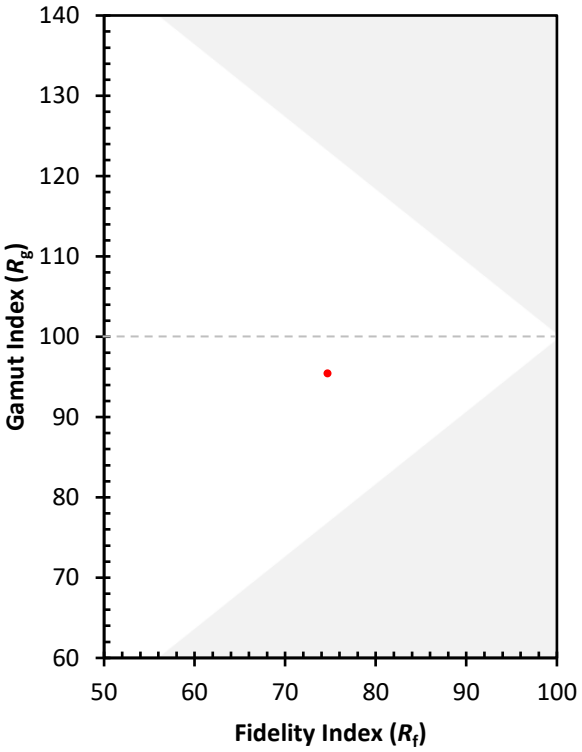
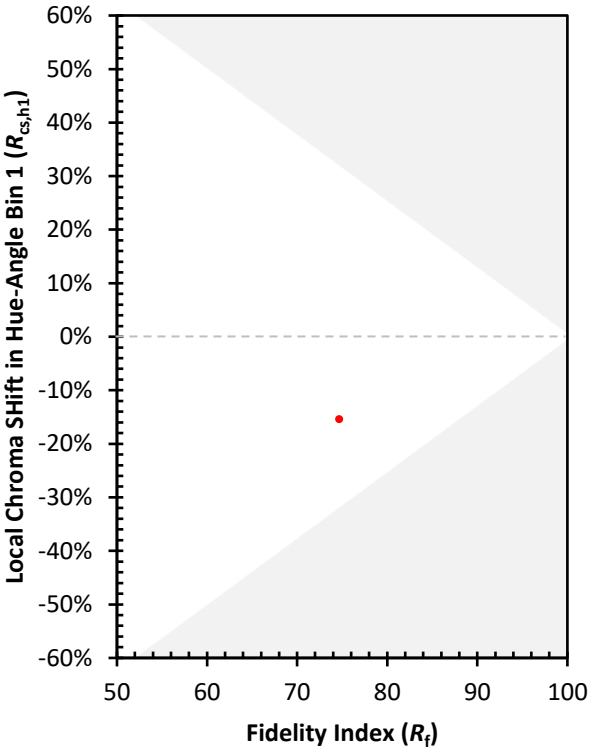
Measure Comparisons





(END OF REPORT)