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: STREETWORKS

Report Number: P1046259

Luminaire Tested: **FFX-CLB-50-740-U-FR-T4-UPLR-HSS**

Issue Date: 07/01/2025

Report Generated By 670347003

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:	P1046259
Test Lab:	INNOVATION CENTER(G3)
Issue Date:	07/01/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	STREETWORKS
Catalog Number:	FFX-CLB-50-740-U-FR-T4-UPLR-HSS
Description:	FAIRFAX POST TOP FIXTURE w/ FAIRFAX REFRACTOR T4 DISTRIBUTION, UPLIGHT REFLECTOR AND HOUSESIDE SHIELD
Light Source:	(4) 4000K CCT, 70 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	7465.2 lumens
Efficiency:	N/A
Efficacy:	147.5 lumens/watt
Luminous Opening:	Vertical Cylinder (Dia: 1.17' x H: 1.67')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U4 - G3

Input Watts (W):	50.6
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.99
Total Harmonic Distortion (THDi):	6.12%
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

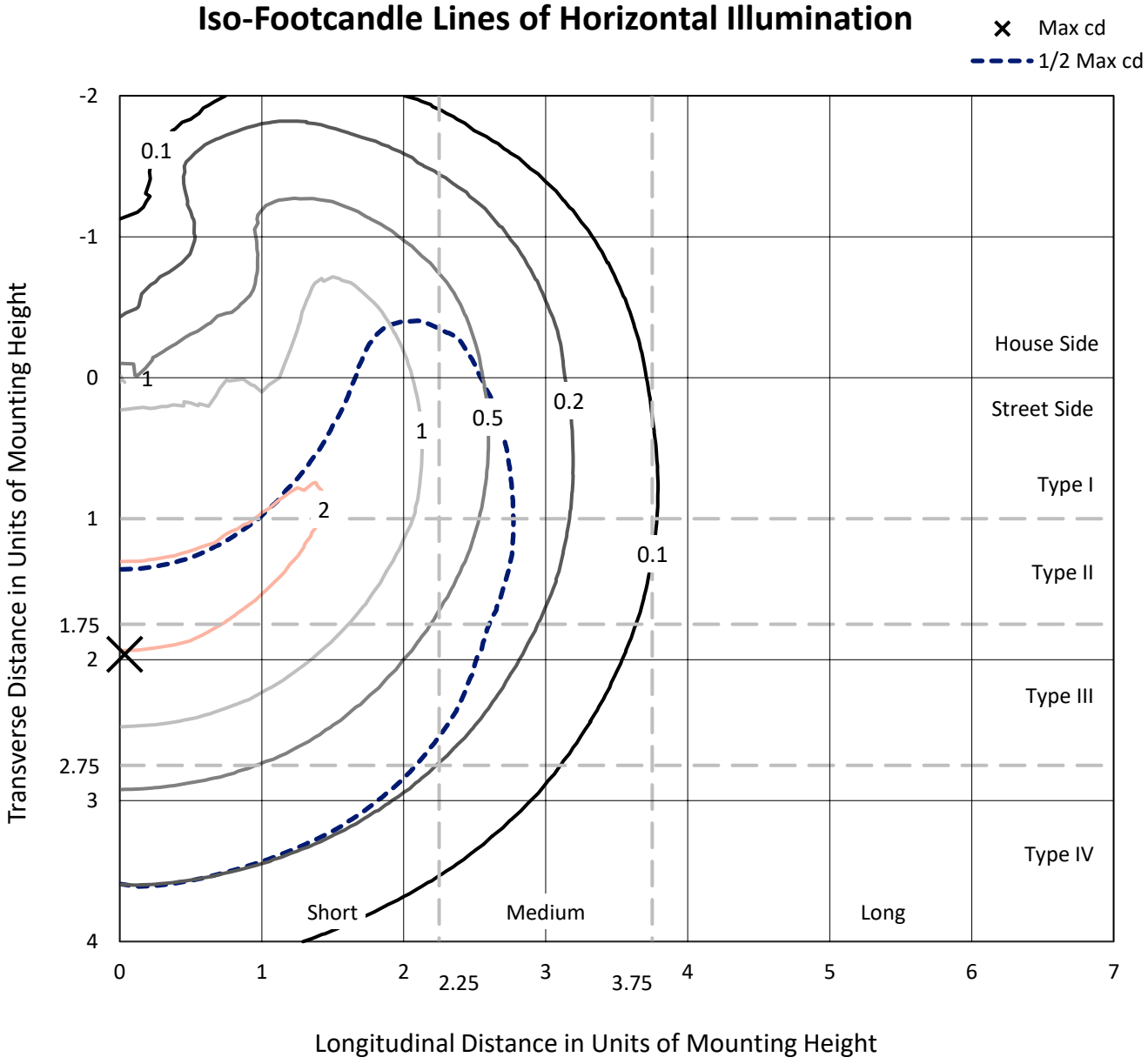


Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1046259
CATALOG NUMBER: FFX-CLB-50-740-U-FR-T4-UPLR-HSS

Iso-Footcandle Lines of Horizontal Illumination



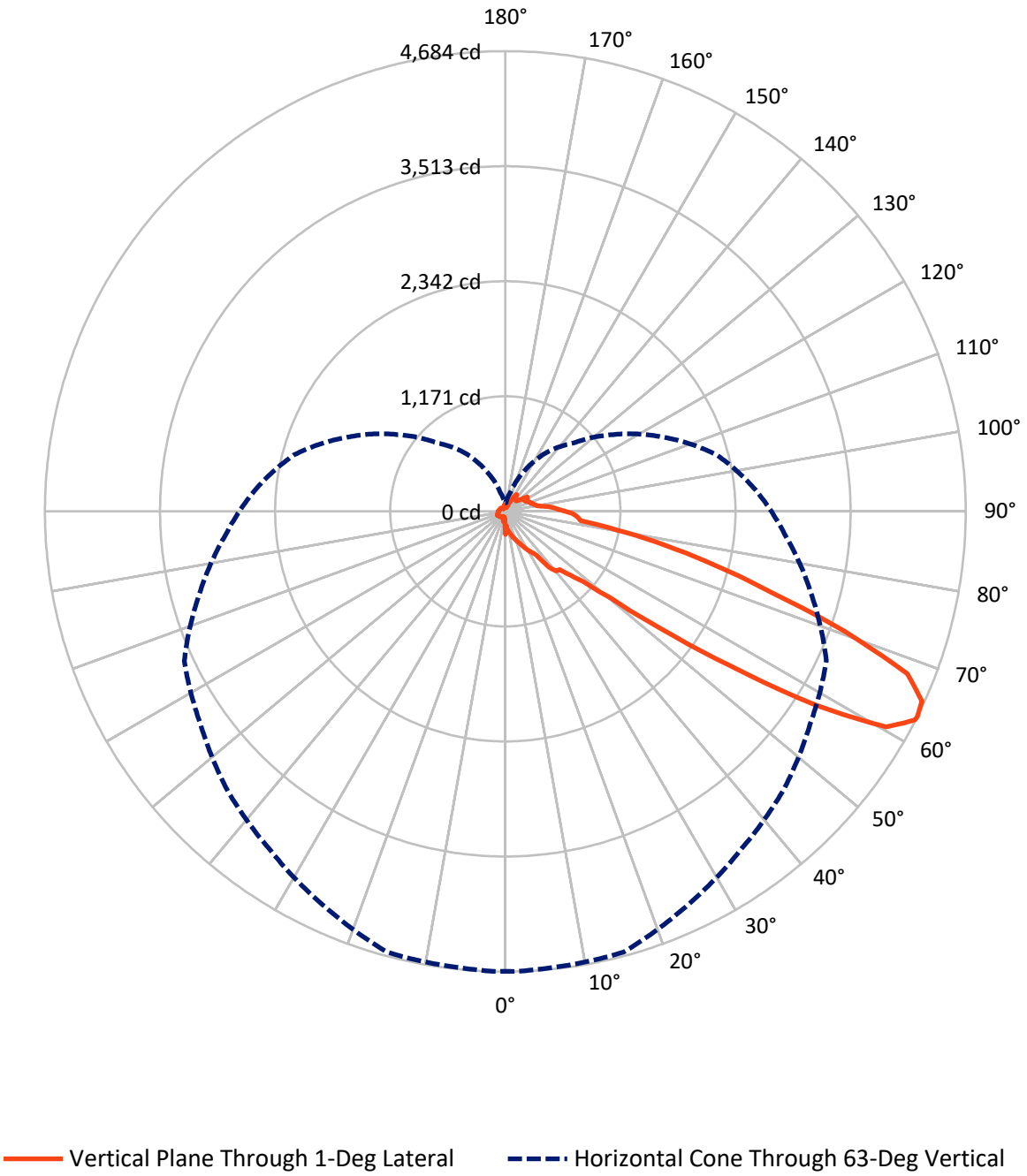
Based on 15 foot mounting height. Maximum calculated value = 2.5 fc
Type IV - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P1046259
CATALOG NUMBER: FFX-CLB-50-740-U-FR-T4-UPLR-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

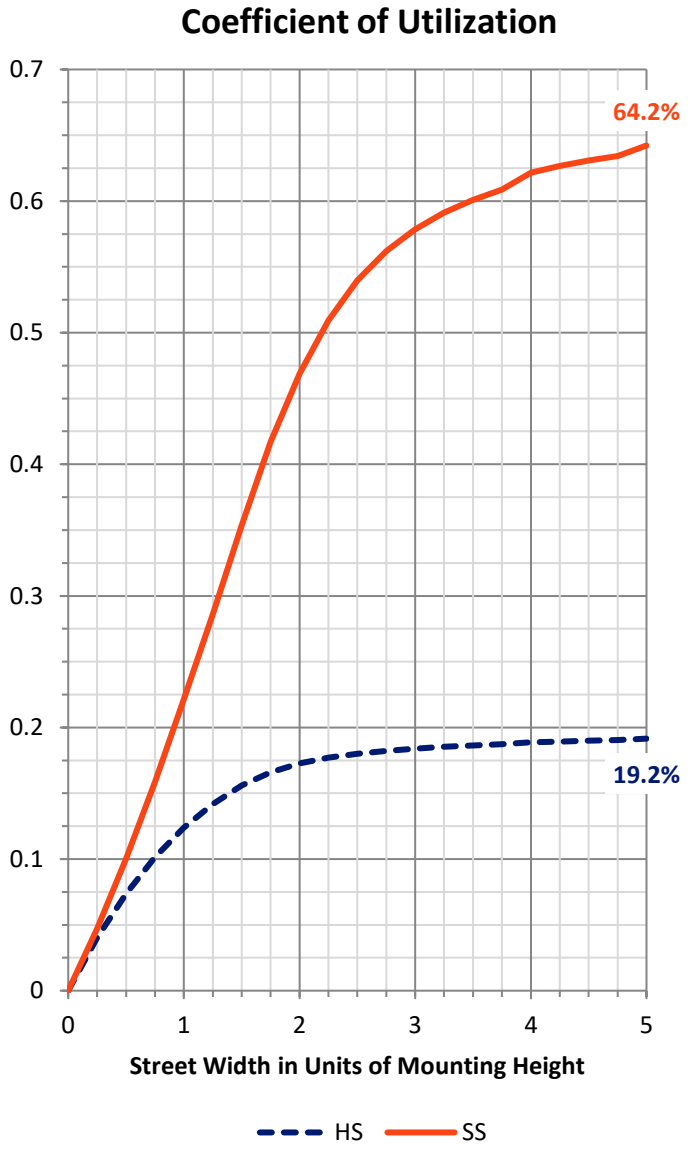
REPORT NUMBER: P1046259
CATALOG NUMBER: FFX-CLB-50-740-U-FR-T4-UPLR-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1478.1	296.1	1774.1
	% Fixture	19.8	4.0	23.8
Street Side	Lumens	5007.5	683.6	5691.0
	% Fixture	67.1	9.2	76.2
Total	Lumens	6485.6	979.6	7465.2
	% Fixture	86.9	13.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.0	0.2
10°-20°	49.1	0.7
20°-30°	108.3	1.5
30°-40°	221.7	3.0
40°-50°	447.6	6.0
50°-60°	1445.0	19.4
60°-70°	2380.6	31.9
70°-80°	1312.3	17.6
80°-90°	507.0	6.8
90°-100°	304.0	4.1
100°-110°	193.7	2.6
110°-120°	148.1	2.0
120°-130°	126.3	1.7
130°-140°	84.7	1.1
140°-150°	72.2	1.0
150°-160°	32.9	0.4
160°-170°	13.3	0.2
170°-180°	4.5	0.1
0°-90°	6485.6	86.9
0°-180°	7465.2	100.0



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

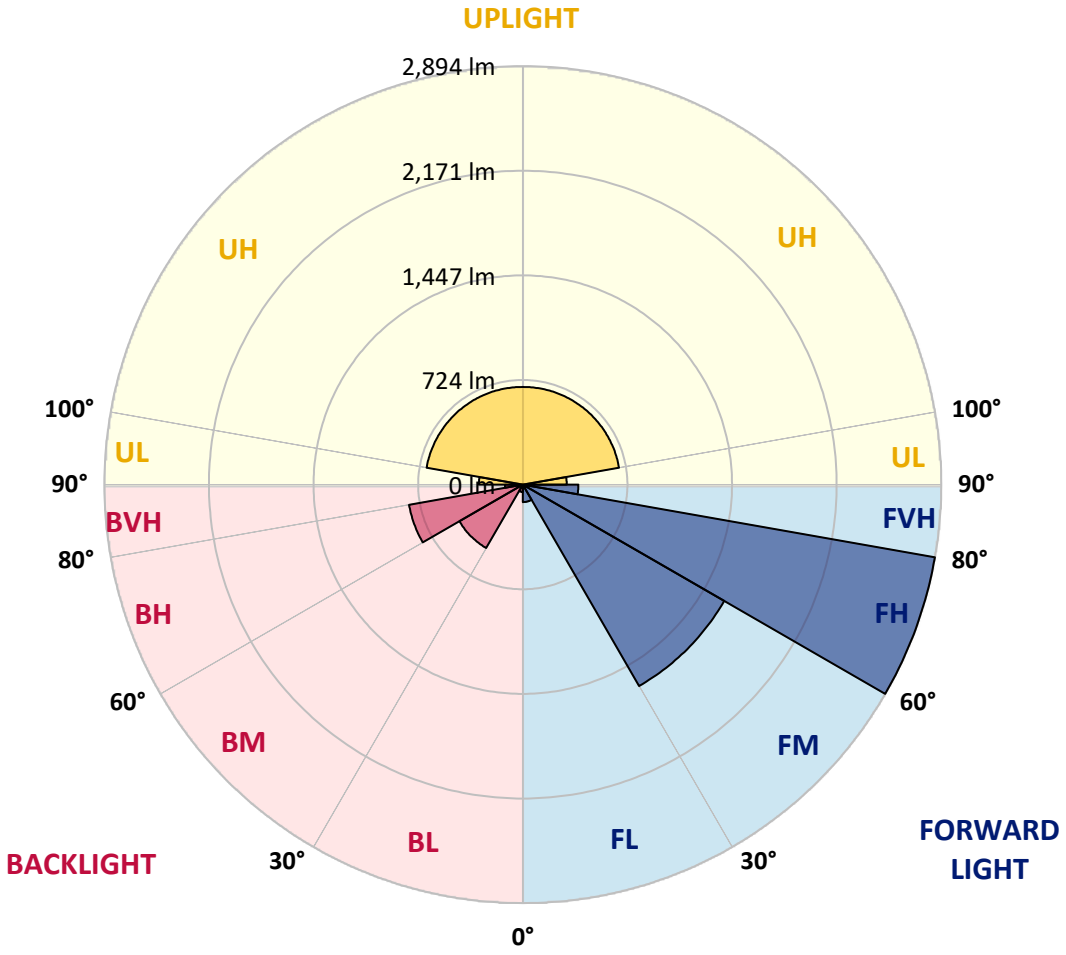
Scaled Data Report

REPORT NUMBER: P1046259
CATALOG NUMBER: FFX-CLB-50-740-U-FR-T4-UPLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	120.9	1.6			
FM	(30°-60°)	1608.3	21.5			
FH	(60°-80°)	2894.1	38.8			G2/5000
FVH	(80°-90°)	384.2	5.1			G3/500
BL	(0°-30°)	50.4	0.7	B0/110		
BM	(30°-60°)	506.0	6.8	B1/1000		
BH	(60°-80°)	798.8	10.7	B2/1000		G2/1000
BVH	(80°-90°)	122.8	1.6			G2/225
UL	(90°-100°)	304.0	4.1		U3/500	
UH	(100°-180°)	675.7	9.1		U4/1000	

BUG Rating: B2-U4-G3
Type IV Short



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

Scaled Data Report

REPORT NUMBER: P1046259
CATALOG NUMBER: FFX-CLB-50-740-U-FR-T4-UPLR-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	236.3	236.3	236.3	236.3	236.3	236.3	236.3	236.3	236.3	236.3	236.3
2.5°	146.0	144.4	151.3	172.6	196.0	203.4	188.0	182.1	199.1	238.4	242.7
5°	168.3	171.0	169.4	172.1	174.2	190.6	205.5	190.1	154.0	125.9	128.0
7.5°	198.6	198.1	198.1	196.0	185.3	168.3	163.6	175.8	176.3	147.6	125.3
10°	211.9	211.4	211.4	209.2	207.1	208.7	203.4	181.1	163.0	151.3	143.9
12.5°	240.0	239.0	238.4	237.4	233.7	229.4	225.7	226.8	211.4	182.1	163.0
15°	263.4	262.3	263.4	264.5	261.8	254.4	243.7	228.9	215.1	202.9	185.9
17.5°	288.9	288.4	287.8	286.8	283.0	273.0	260.2	246.4	231.0	214.0	198.1
20°	313.3	312.3	312.8	313.3	311.7	299.5	286.8	269.8	253.3	236.8	218.3
22.5°	342.5	342.5	340.9	340.9	339.3	331.9	316.0	296.3	279.3	258.6	237.9
25°	380.2	378.6	378.6	377.0	370.7	362.7	351.5	329.2	309.1	289.4	261.8
27.5°	417.4	415.8	415.8	415.3	407.3	396.7	378.1	356.9	337.7	312.8	279.3
30°	459.9	458.8	459.3	453.5	447.1	432.3	408.9	384.5	359.5	330.3	297.9
32.5°	502.9	499.7	499.2	492.8	484.3	466.3	440.2	416.9	390.8	356.9	329.8
35°	553.3	546.4	553.9	552.3	551.2	532.1	502.4	475.3	444.5	413.7	384.5
37.5°	720.1	723.3	721.7	700.4	683.4	657.4	644.2	612.3	569.8	532.1	476.9
40°	798.7	797.6	795.0	771.6	756.2	729.1	707.9	684.0	659.0	600.1	531.6
42.5°	815.7	809.8	814.1	835.9	856.0	838.0	770.5	693.5	658.5	617.1	581.5
45°	939.9	925.1	931.4	937.3	917.6	891.6	862.4	812.5	753.5	694.1	628.8
47.5°	1072.7	1064.7	1064.2	1062.1	1064.2	1039.2	1000.5	954.3	870.9	806.6	733.9
50°	1396.1	1385.5	1388.7	1391.3	1380.2	1354.7	1312.7	1282.5	1182.6	1059.4	964.9
52.5°	1989.3	1982.9	1968.0	1969.1	1868.7	1863.4	1806.6	1779.5	1632.4	1491.7	1301.0
55°	2721.6	2763.0	2717.3	2708.3	2666.9	2629.7	2487.4	2369.5	2158.7	1956.3	1732.8
57.5°	3713.6	3720.5	3662.6	3664.2	3517.1	3423.6	3292.4	3111.9	2798.0	2506.0	2255.3
60°	4436.3	4453.8	4426.7	4370.5	4085.8	3918.5	3774.1	3631.8	3392.3	2958.4	2609.5
62.5°	4671.5	4676.9	4659.9	4630.1	4378.9	4165.5	3979.6	3773.0	3589.3	3198.4	2848.0
63°	4680.0	4683.8	4670.5	4645.0	4411.9	4190.4	4004.6	3783.7	3603.6	3219.7	2862.3
65°	4657.2	4658.8	4653.0	4619.0	4432.6	4198.4	3993.9	3776.2	3611.1	3228.2	2862.3
67.5°	4451.7	4411.3	4428.3	4371.0	4215.9	3982.8	3787.4	3565.4	3416.7	3046.6	2696.1
70°	3662.6	3665.2	3662.6	3631.2	3587.2	3402.9	3174.6	2974.9	2786.9	2496.4	2221.3
72.5°	2833.6	2844.8	2820.3	2838.4	2802.8	2650.4	2502.8	2300.5	2168.2	1921.8	1679.1
75°	2194.8	2217.6	2225.1	2173.5	2142.7	2110.3	2029.6	1884.1	1751.9	1561.3	1349.4
77.5°	1658.4	1662.7	1669.1	1634.0	1593.6	1606.4	1594.7	1525.7	1414.7	1274.5	1106.2
80°	1146.0	1158.2	1178.9	1158.7	1163.5	1156.1	1154.5	1099.3	1019.1	930.9	840.6
82.5°	770.0	769.5	774.8	807.2	836.9	835.9	788.6	711.1	670.2	644.7	593.7
85°	737.1	737.1	744.5	721.2	706.3	691.4	688.2	661.7	630.3	573.0	502.4
87.5°	687.2	685.6	687.7	667.5	647.9	643.1	638.3	615.5	601.7	551.7	487.0
90°	587.9	592.1	592.1	590.5	578.3	573.5	554.4	535.3	526.8	481.7	430.7
92.5°	518.8	518.8	524.7	514.6	501.3	508.7	475.8	450.9	439.2	408.9	368.5
95°	468.9	467.3	474.7	460.4	450.9	437.0	423.2	397.2	388.7	362.7	321.8
97.5°	374.4	372.8	377.0	370.1	355.3	348.9	334.0	313.3	305.3	280.9	256.0
100°	322.3	321.8	323.4	319.7	311.2	303.2	290.5	274.0	266.6	246.4	224.1
102.5°	305.9	304.3	304.8	305.3	293.1	285.7	273.5	260.7	253.3	236.8	212.4
105°	291.0	289.9	288.9	288.9	275.1	267.6	259.7	251.2	244.8	226.8	203.4
107.5°	277.2	275.6	271.9	271.4	262.3	254.4	244.8	237.4	231.0	214.5	192.2

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

Scaled Data Report

REPORT NUMBER: P1046259
CATALOG NUMBER: FFX-CLB-50-740-U-FR-T4-UPLR-HSS

CANDELA DISTRIBUTION (continued):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
110°	261.8	*261.3*	259.1	259.7	253.8	241.6	233.7	224.6	216.7	202.3	182.7
112.5°	253.8	*253.8*	252.2	254.9	232.6	220.4	211.9	203.9	198.6	184.8	169.9
115°	245.3	*241.1*	239.5	244.8	219.3	202.3	193.8	185.3	180.0	166.2	154.0
117.5°	227.3	*226.2*	226.8	231.0	223.6	205.0	191.2	180.6	175.2	165.2	154.0
120°	259.1	*258.1*	251.7	250.7	237.9	223.0	214.0	208.2	200.2	183.7	162.5
122.5°	270.8	*268.7*	258.6	261.8	244.8	237.4	233.7	231.5	224.1	202.3	169.9
125°	235.8	*232.6*	229.9	231.0	221.4	211.9	208.2	205.0	197.5	185.3	162.0
127.5°	189.0	*190.6*	188.5	182.7	181.1	166.7	162.0	158.2	151.3	141.3	137.5
130°	177.4	*176.3*	175.8	174.7	173.6	163.0	155.6	146.6	140.7	132.2	122.1
132.5°	157.7	*158.8*	160.4	169.4	177.9	168.9	149.8	135.9	132.2	133.8	129.6
135°	149.8	*150.3*	150.3	157.2	164.6	155.6	141.3	128.0	126.4	132.2	126.9
137.5°	153.5	*156.1*	155.6	154.0	149.8	143.4	140.2	132.8	128.5	124.8	115.8
140°	162.0	*165.2*	163.6	154.5	151.3	148.2	150.3	147.6	137.0	124.3	111.0
142.5°	160.9	*163.6*	162.5	161.4	167.3	159.8	149.8	139.7	131.2	124.3	115.8
145°	208.7	*207.6*	203.4	203.4	196.5	185.3	178.4	167.8	157.7	148.7	134.9
147.5°	192.8	*195.4*	196.5	191.7	188.5	181.1	180.0	174.2	171.0	163.0	148.7
150°	152.9	*155.1*	151.9	148.2	146.6	147.1	144.4	140.2	137.0	131.2	124.8
152.5°	105.7	*106.7*	105.7	102.5	101.4	99.8	100.4	97.2	95.1	91.3	85.5
155°	96.1	*96.6*	97.2	91.9	90.8	91.3	91.9	89.7	85.5	82.3	75.4
157.5°	75.4	*74.3*	74.3	73.3	73.8	72.2	72.2	71.7	70.1	68.0	65.8
160°	60.0	*60.5*	60.5	60.5	61.6	60.5	60.5	58.9	58.9	57.9	56.8
162.5°	51.0	*51.0*	51.0	51.0	50.4	50.4	51.5	51.0	51.0	51.5	52.6
165°	43.0	*43.5*	43.5	43.5	43.5	43.5	44.6	44.6	45.7	47.8	50.4
167.5°	40.4	*39.8*	39.8	40.4	40.4	41.4	41.4	43.5	47.3	51.0	51.0
170°	38.2	*38.2*	38.2	38.8	38.8	39.3	40.9	44.6	48.9	50.4	48.3
172.5°	39.8	*39.3*	39.3	39.8	39.8	41.4	43.5	46.7	48.3	48.3	46.2
175°	40.9	*40.4*	40.4	40.9	40.9	42.0	44.1	46.2	47.3	47.8	47.8
177.5°	39.8	*39.8*	39.8	39.8	39.8	40.4	40.4	42.0	43.0	44.1	45.1
180°	38.2	*38.2*	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2

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

Scaled Data Report

REPORT NUMBER: P1046259
CATALOG NUMBER: FFX-CLB-50-740-U-FR-T4-UPLR-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	236.3	236.3	236.3	236.3	236.3	236.3	236.3	236.3	236.3	236.3	236.3
2.5°	242.7	221.4	190.1	151.9	176.8	207.6	203.4	179.5	143.4	107.8	107.8
5°	134.4	142.3	150.3	131.7	117.9	116.8	113.6	102.0	100.4	82.8	78.1
7.5°	117.4	109.9	108.3	128.0	126.4	83.4	65.8	58.4	61.6	83.4	86.0
10°	140.7	137.5	127.4	106.2	88.7	80.7	80.2	81.2	74.3	60.0	56.3
12.5°	158.8	153.5	144.4	138.1	117.9	94.0	80.7	74.9	79.1	100.4	105.1
15°	176.3	168.9	153.5	135.9	115.8	98.2	84.4	72.2	72.2	69.0	67.4
17.5°	190.1	180.6	162.0	142.8	120.0	98.2	80.2	68.0	62.1	61.1	61.1
20°	207.6	198.6	178.4	155.1	126.4	99.3	79.7	68.0	61.1	58.4	57.9
22.5°	229.4	217.7	191.7	164.1	130.1	100.4	80.7	68.5	61.6	57.9	56.8
25°	249.6	236.3	205.5	176.8	138.6	103.0	81.8	70.1	62.7	58.4	57.9
27.5°	266.1	251.7	223.0	190.1	147.6	109.4	87.1	73.3	64.3	60.0	58.9
30°	284.6	271.4	241.1	203.9	156.1	117.4	94.5	79.1	69.0	63.2	62.7
32.5°	312.3	295.8	260.7	218.3	166.2	125.9	102.0	84.4	72.2	69.0	69.0
35°	362.2	345.2	299.0	241.6	175.8	134.4	109.4	90.3	77.0	69.6	69.0
37.5°	455.6	432.3	374.4	294.7	192.2	141.3	115.8	95.1	79.7	69.0	67.4
40°	498.6	458.8	397.2	322.9	216.1	149.2	121.1	98.8	80.2	70.6	69.6
42.5°	549.6	516.2	429.1	329.8	233.7	168.9	130.1	103.0	83.4	72.8	71.7
45°	598.5	566.1	492.8	389.8	273.0	198.1	146.0	111.5	88.7	75.9	73.8
47.5°	687.2	653.2	551.2	451.4	327.1	243.7	177.9	124.8	96.1	79.1	76.5
50°	917.6	869.3	749.3	597.9	418.5	309.6	227.8	152.4	106.2	80.7	77.5
52.5°	1215.0	1141.2	1011.1	817.8	598.5	438.1	319.2	221.4	123.7	81.2	76.5
55°	1697.2	1606.4	1397.2	1114.7	838.0	653.7	483.2	340.4	182.1	85.0	75.9
57.5°	2154.4	2087.0	1904.3	1525.1	1111.5	830.5	635.7	479.0	248.0	93.5	79.7
60°	2490.6	2362.1	2148.6	1759.9	1342.5	963.8	707.3	498.1	254.9	95.1	82.3
62.5°	2691.3	2532.5	2216.0	1793.8	1375.4	991.4	736.0	458.3	206.0	92.9	86.0
63°	*2706.2*	*2552.2*	*2224.5*	*1782.2*	*1364.8*	*984.0*	*731.8*	*448.7*	*200.2*	*92.4*	*87.1*
65°	2687.6	2553.8	2194.8	1721.1	1274.5	918.2	681.3	403.1	162.5	90.8	88.2
67.5°	2502.8	2393.9	2039.2	1555.9	1134.8	792.8	564.0	307.5	126.9	86.6	85.5
70°	2094.9	1970.2	1648.3	1286.2	899.6	640.4	449.8	238.4	104.6	82.3	81.2
72.5°	1559.1	1507.1	1252.2	978.7	691.9	493.9	337.7	181.1	92.9	79.1	78.1
75°	1260.7	1182.6	993.0	773.2	526.3	366.9	250.7	135.9	85.0	76.5	75.4
77.5°	1042.4	990.4	826.3	583.6	375.4	264.5	184.3	107.8	81.2	74.9	74.3
80°	807.2	774.8	644.7	431.7	268.7	197.0	146.0	98.8	79.7	74.3	73.8
82.5°	569.3	559.2	469.4	322.9	228.3	176.3	135.9	97.2	80.2	75.4	74.3
85°	471.6	449.8	395.1	306.9	216.7	168.9	131.2	95.6	80.2	74.9	74.3
87.5°	459.3	441.3	382.3	287.3	198.6	156.1	123.2	91.9	77.5	72.8	72.2
90°	415.3	397.2	342.5	256.5	186.9	146.6	115.2	87.1	74.3	70.6	69.6
92.5°	354.2	337.7	297.4	233.1	179.0	140.7	112.0	85.5	73.8	69.6	69.0
95°	307.5	293.7	260.7	214.5	165.2	131.2	106.2	82.3	71.7	68.0	67.4
97.5°	244.8	236.3	210.8	174.7	139.7	114.7	95.1	77.5	69.0	65.8	65.3
100°	215.6	208.2	188.0	158.2	129.6	108.3	91.9	75.9	66.9	64.3	63.7
102.5°	202.3	196.5	178.4	148.7	121.6	103.0	87.6	73.3	65.3	62.7	62.1
105°	192.2	186.9	170.5	141.8	114.7	96.1	82.3	70.1	62.7	60.5	60.0
107.5°	180.0	175.8	159.8	131.7	107.8	90.3	78.1	67.4	61.1	58.9	58.9

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

Scaled Data Report

REPORT NUMBER: P1046259
CATALOG NUMBER: FFX-CLB-50-740-U-FR-T4-UPLR-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	169.9	166.7	150.3	125.9	103.0	86.6	75.4	66.4	60.5	58.4	58.4
112.5°	159.3	155.6	140.2	118.4	98.8	83.9	73.3	64.8	59.5	57.4	57.4
115°	147.6	143.9	129.0	109.9	93.5	79.7	70.1	62.1	57.4	55.8	55.8
117.5°	149.8	140.2	122.1	105.1	89.2	76.5	68.0	61.1	55.8	54.7	54.2
120°	151.9	139.7	126.4	110.5	91.9	74.9	66.4	59.5	55.2	53.6	53.6
122.5°	148.2	149.8	138.1	113.6	87.6	73.3	65.8	60.0	55.8	54.2	54.7
125°	145.0	148.7	134.9	107.3	84.4	72.8	65.8	61.6	57.9	56.3	56.3
127.5°	133.3	133.8	114.7	96.1	82.3	71.2	65.3	62.1	58.9	56.8	55.8
130°	117.4	116.3	107.3	93.5	77.5	68.5	63.2	61.6	58.4	54.7	54.2
132.5°	125.9	122.7	107.8	88.7	73.3	65.8	62.7	60.5	55.2	51.0	50.4
135°	119.5	116.3	100.9	82.8	71.2	66.9	65.3	60.0	52.0	48.9	48.3
137.5°	108.9	103.6	90.8	79.1	72.2	69.6	65.8	58.9	51.0	47.3	46.7
140°	104.6	99.3	89.2	81.2	73.3	64.8	58.4	52.0	46.7	43.5	43.0
142.5°	109.9	105.7	95.6	81.2	68.5	59.5	53.6	49.4	44.6	39.8	39.3
145°	128.0	120.0	106.2	91.3	78.1	67.4	58.4	49.4	40.9	35.6	35.0
147.5°	141.8	135.4	120.5	103.6	85.0	68.0	54.7	43.5	36.6	33.5	32.9
150°	117.9	114.2	103.0	89.2	75.4	60.0	47.3	38.8	34.5	33.5	33.5
152.5°	82.3	79.7	75.9	66.9	56.3	47.3	40.4	36.1	34.5	34.0	34.0
155°	72.8	71.2	66.4	58.4	51.0	44.1	38.8	35.6	35.0	34.5	34.5
157.5°	62.7	62.1	58.9	52.6	46.7	41.4	37.7	36.1	35.0	34.5	34.5
160°	56.3	54.7	51.5	47.3	43.5	40.4	38.2	37.2	36.1	35.6	35.6
162.5°	52.6	51.5	47.8	44.6	42.5	42.0	42.5	42.0	39.3	37.7	37.2
165°	49.9	49.4	45.7	43.5	42.5	45.1	48.3	47.3	42.5	39.8	39.8
167.5°	49.9	48.9	45.1	43.5	46.2	49.9	52.6	52.0	47.8	45.1	43.5
170°	47.3	46.2	45.1	45.7	49.4	51.0	51.5	52.6	53.1	55.8	56.8
172.5°	45.7	45.7	46.7	48.9	52.0	52.6	51.0	51.5	56.3	62.1	62.7
175°	47.8	47.8	49.9	53.6	55.2	56.3	54.2	54.7	60.0	65.8	66.4
177.5°	45.7	46.2	47.3	47.8	47.3	45.7	45.1	47.3	45.7	45.1	46.7
180°	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2

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

Streetworks

Report Number: SP1-2501-332-11

Test Date: 03/26/2025

Luminaire Tested: FFX-CLB-20-740-U-FR-T5-UPLR-P-HSS

Data in this report applies to families of products including FFX-CLB-20-740-U-FR-T5-UPLR-P-HSS

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

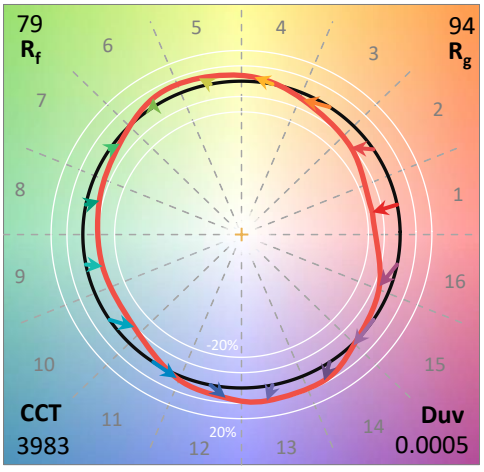
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2501-332-11
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	03/31/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Streetworks
Catalog Number:	**FFX-CLB-20-740-U-FR-T5-UPLR-P-HSS**
Description:	FAIRFAX ACORN W/ FAIRFAX T5 POLYCARBONATE REFRACTOR 20W WITH UPLIGHT REFLECTOR AND HOUSE SIDE SHIELD

Spectral Parameters

CCT (K):	3983	CRI (Ra):	76.2		
CIE u':	0.2252	R1:	72.6	R9:	-26.0
CIE v':	0.5025	R2:	84.0	R10:	63.7
Duv:	0.0005	R3:	93.4	R11:	72.4
CIE x:	0.3815	R4:	74.5	R12:	56.4
CIE y:	0.3785	R5:	73.8	R13:	75.0
CIE z:	0.2400	R6:	78.3	R14:	96.6
Peak Wavelength (nm):	448	R7:	81.1	R15:	64.5
Dominant Wavelength (nm):	578	R8:	52.1		
Purity:	28.07575				

Rf:	79
Rg:	94.1



Test Conditions

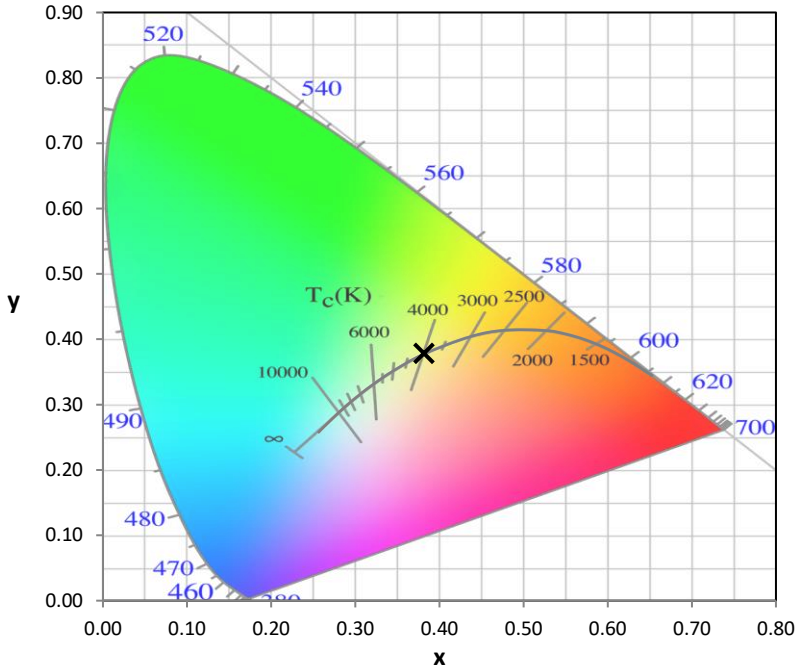
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.8

REPORT NUMBER: SP1-2501-332-11

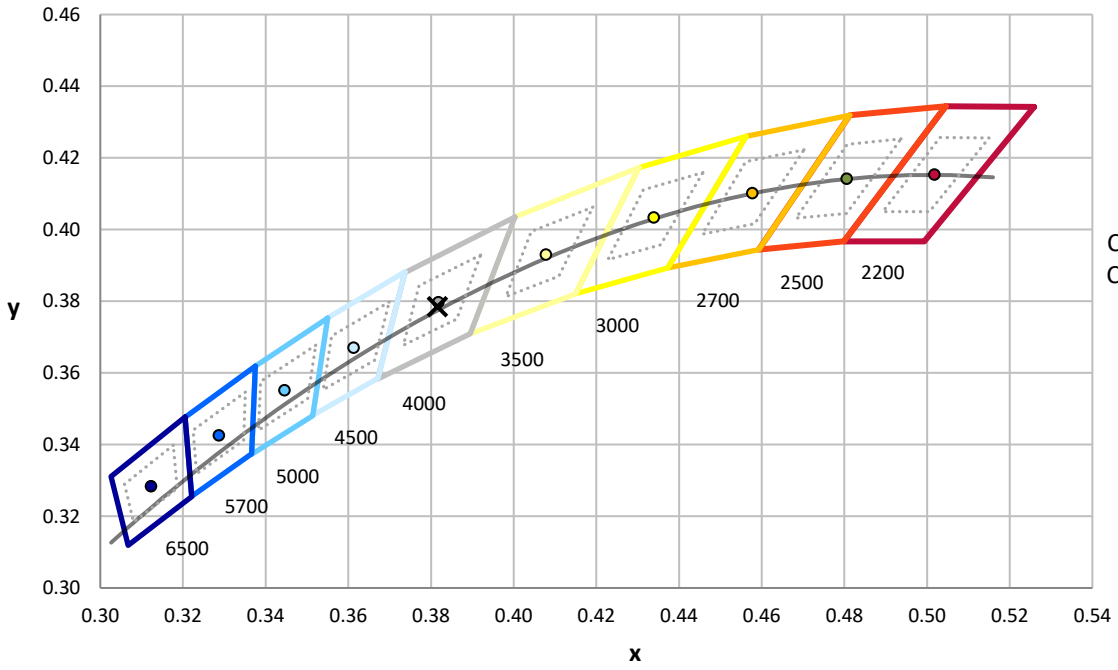
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	12/16/2024	6/16/2025
Power Meter	INXT2011004	1/21/2025	1/21/2026
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085	10/22/2024	10/22/2025
Room Thermometer	IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2501-332-11

CIE 1931 Chromaticity Diagram



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

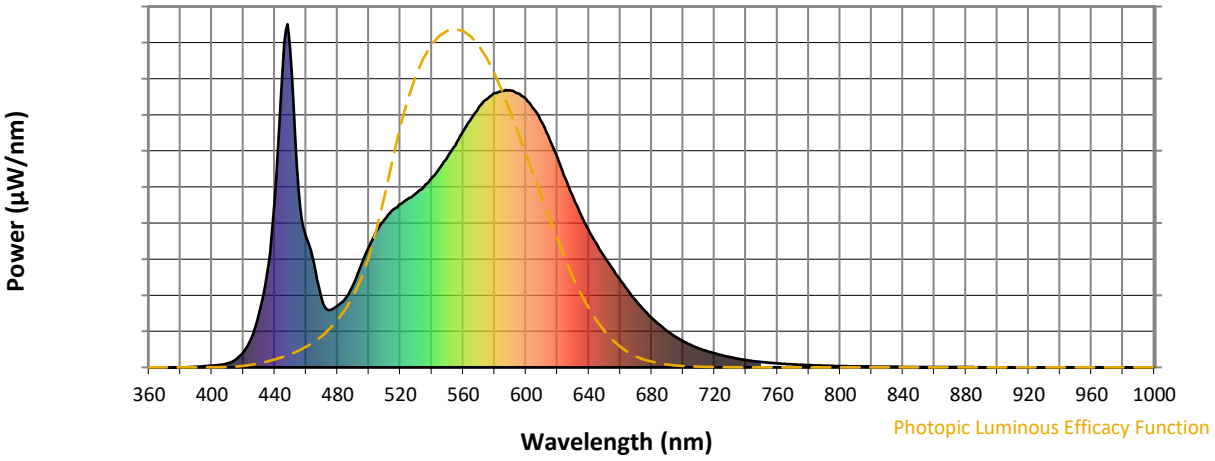


CCT = 3983K
CIE x = 0.3815
CIE y = 0.3785
Duv = 0.0005

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2501-332-11

Photopic Flux vs. Wavelength

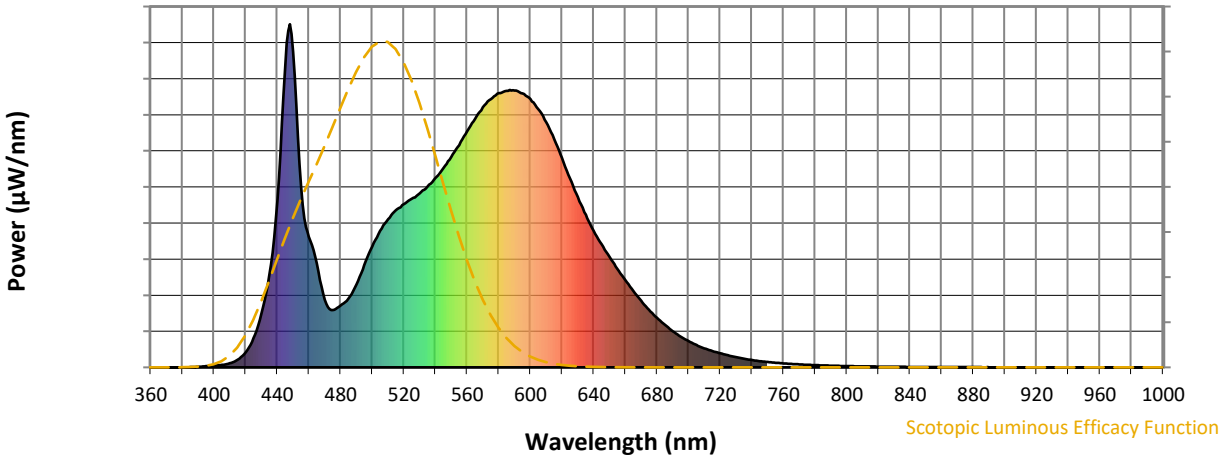


Photopic Lumens: NR

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	241	NR	620	611	NR	750	16	NR	880	1	NR
365	0	NR	495	298	NR	625	551	NR	755	13	NR	885	1	NR
370	0	NR	500	352	NR	630	496	NR	760	12	NR	890	0	NR
375	0	NR	505	399	NR	635	444	NR	765	10	NR	895	0	NR
380	0	NR	510	432	NR	640	398	NR	770	9	NR	900	0	NR
385	1	NR	515	458	NR	645	359	NR	775	8	NR	905	0	NR
390	2	NR	520	476	NR	650	321	NR	780	7	NR	910	0	NR
395	3	NR	525	492	NR	655	287	NR	785	6	NR	915	0	NR
400	5	NR	530	508	NR	660	254	NR	790	5	NR	920	0	NR
405	7	NR	535	527	NR	665	223	NR	795	4	NR	925	0	NR
410	12	NR	540	552	NR	670	194	NR	800	4	NR	930	0	NR
415	23	NR	545	582	NR	675	168	NR	805	3	NR	935	0	NR
420	44	NR	550	613	NR	680	144	NR	810	3	NR	940	0	NR
425	85	NR	555	648	NR	685	124	NR	815	3	NR	945	0	NR
430	156	NR	560	689	NR	690	105	NR	820	2	NR	950	0	NR
435	272	NR	565	725	NR	695	90	NR	825	2	NR	955	0	NR
440	486	NR	570	758	NR	700	76	NR	830	2	NR	960	0	NR
445	871	NR	575	782	NR	705	65	NR	835	2	NR	965	0	NR
450	919	NR	580	799	NR	710	55	NR	840	1	NR	970	0	NR
455	526	NR	585	806	NR	715	48	NR	845	1	NR	975	0	NR
460	380	NR	590	807	NR	720	41	NR	850	1	NR	980	0	NR
465	303	NR	595	799	NR	725	35	NR	855	1	NR	985	0	NR
470	197	NR	600	782	NR	730	30	NR	860	1	NR	990	0	NR
475	167	NR	605	752	NR	735	25	NR	865	1	NR	995	0	NR
480	180	NR	610	714	NR	740	21	NR	870	1	NR	1000	0	NR
485	201	NR	615	665	NR	745	18	NR	875	1	NR			

REPORT NUMBER: SP1-2501-332-11

Scotopic Flux vs. Wavelength

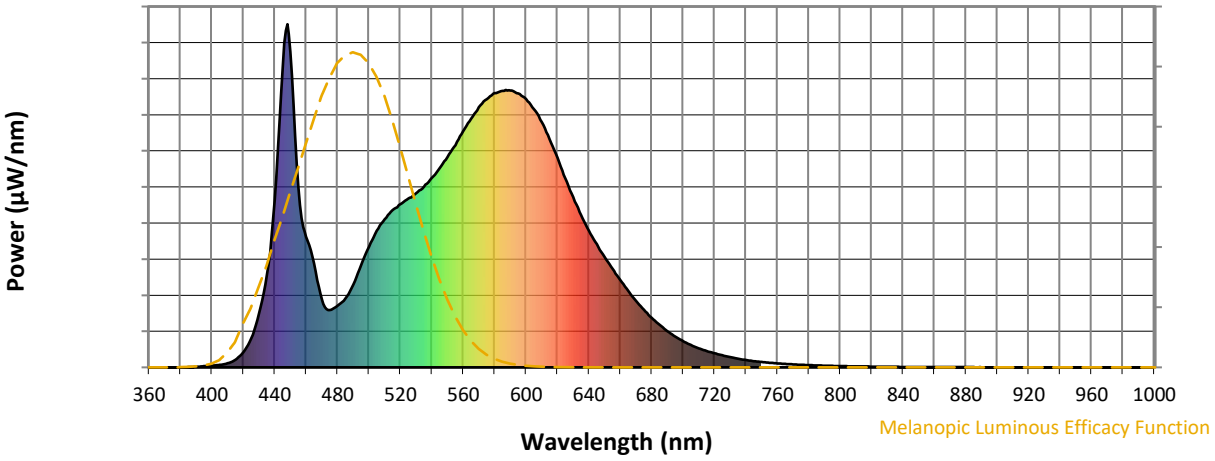


Scotopic Lumens: NR **S/P: 1.61**

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	241	NR	620	611	NR	750	16	NR	880	1	NR
365	0	NR	495	298	NR	625	551	NR	755	13	NR	885	1	NR
370	0	NR	500	352	NR	630	496	NR	760	12	NR	890	0	NR
375	0	NR	505	399	NR	635	444	NR	765	10	NR	895	0	NR
380	0	NR	510	432	NR	640	398	NR	770	9	NR	900	0	NR
385	1	NR	515	458	NR	645	359	NR	775	8	NR	905	0	NR
390	2	NR	520	476	NR	650	321	NR	780	7	NR	910	0	NR
395	3	NR	525	492	NR	655	287	NR	785	6	NR	915	0	NR
400	5	NR	530	508	NR	660	254	NR	790	5	NR	920	0	NR
405	7	NR	535	527	NR	665	223	NR	795	4	NR	925	0	NR
410	12	NR	540	552	NR	670	194	NR	800	4	NR	930	0	NR
415	23	NR	545	582	NR	675	168	NR	805	3	NR	935	0	NR
420	44	NR	550	613	NR	680	144	NR	810	3	NR	940	0	NR
425	85	NR	555	648	NR	685	124	NR	815	3	NR	945	0	NR
430	156	NR	560	689	NR	690	105	NR	820	2	NR	950	0	NR
435	272	NR	565	725	NR	695	90	NR	825	2	NR	955	0	NR
440	486	NR	570	758	NR	700	76	NR	830	2	NR	960	0	NR
445	871	NR	575	782	NR	705	65	NR	835	2	NR	965	0	NR
450	919	NR	580	799	NR	710	55	NR	840	1	NR	970	0	NR
455	526	NR	585	806	NR	715	48	NR	845	1	NR	975	0	NR
460	380	NR	590	807	NR	720	41	NR	850	1	NR	980	0	NR
465	303	NR	595	799	NR	725	35	NR	855	1	NR	985	0	NR
470	197	NR	600	782	NR	730	30	NR	860	1	NR	990	0	NR
475	167	NR	605	752	NR	735	25	NR	865	1	NR	995	0	NR
480	180	NR	610	714	NR	740	21	NR	870	1	NR	1000	0	NR
485	201	NR	615	665	NR	745	18	NR	875	1	NR			

REPORT NUMBER: SP1-2501-332-11

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.24**

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	241	NR	620	611	NR	750	16	NR	880	1	NR
365	0	NR	495	298	NR	625	551	NR	755	13	NR	885	1	NR
370	0	NR	500	352	NR	630	496	NR	760	12	NR	890	0	NR
375	0	NR	505	399	NR	635	444	NR	765	10	NR	895	0	NR
380	0	NR	510	432	NR	640	398	NR	770	9	NR	900	0	NR
385	1	NR	515	458	NR	645	359	NR	775	8	NR	905	0	NR
390	2	NR	520	476	NR	650	321	NR	780	7	NR	910	0	NR
395	3	NR	525	492	NR	655	287	NR	785	6	NR	915	0	NR
400	5	NR	530	508	NR	660	254	NR	790	5	NR	920	0	NR
405	7	NR	535	527	NR	665	223	NR	795	4	NR	925	0	NR
410	12	NR	540	552	NR	670	194	NR	800	4	NR	930	0	NR
415	23	NR	545	582	NR	675	168	NR	805	3	NR	935	0	NR
420	44	NR	550	613	NR	680	144	NR	810	3	NR	940	0	NR
425	85	NR	555	648	NR	685	124	NR	815	3	NR	945	0	NR
430	156	NR	560	689	NR	690	105	NR	820	2	NR	950	0	NR
435	272	NR	565	725	NR	695	90	NR	825	2	NR	955	0	NR
440	486	NR	570	758	NR	700	76	NR	830	2	NR	960	0	NR
445	871	NR	575	782	NR	705	65	NR	835	2	NR	965	0	NR
450	919	NR	580	799	NR	710	55	NR	840	1	NR	970	0	NR
455	526	NR	585	806	NR	715	48	NR	845	1	NR	975	0	NR
460	380	NR	590	807	NR	720	41	NR	850	1	NR	980	0	NR
465	303	NR	595	799	NR	725	35	NR	855	1	NR	985	0	NR
470	197	NR	600	782	NR	730	30	NR	860	1	NR	990	0	NR
475	167	NR	605	752	NR	735	25	NR	865	1	NR	995	0	NR
480	180	NR	610	714	NR	740	21	NR	870	1	NR	1000	0	NR
485	201	NR	615	665	NR	745	18	NR	875	1	NR			

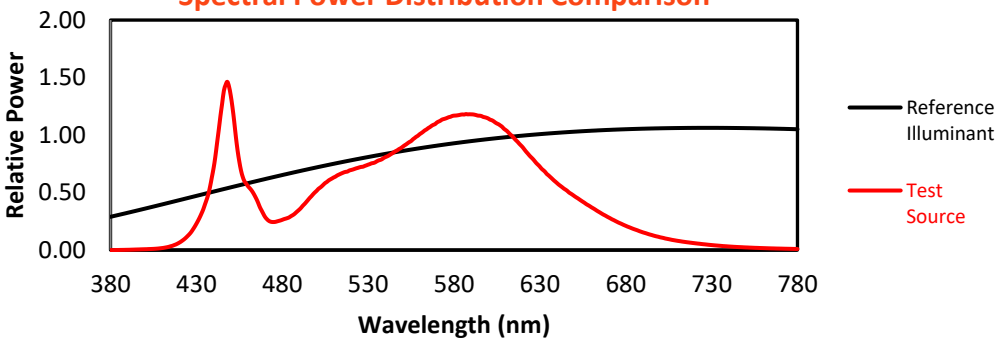
REPORT NUMBER: SP1-2501-332-11

TM-30-18

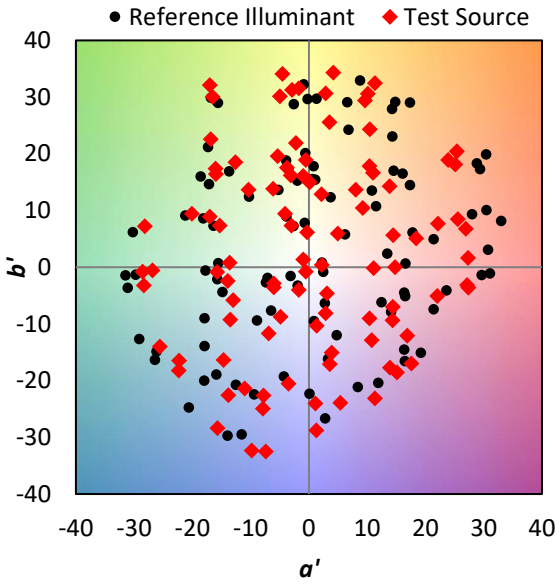
Summary

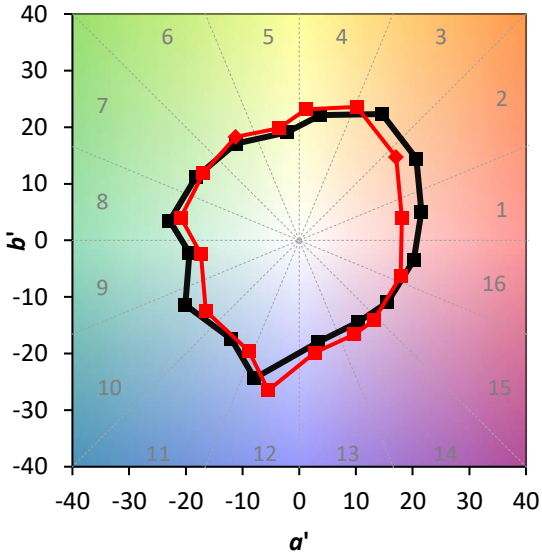
R_f = 79
R_g = 94.1
CIE R_a = 76.2
R_9 = -26.0

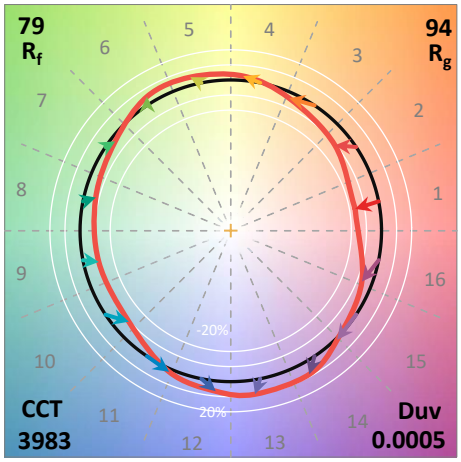
Spectral Power Distribution Comparison

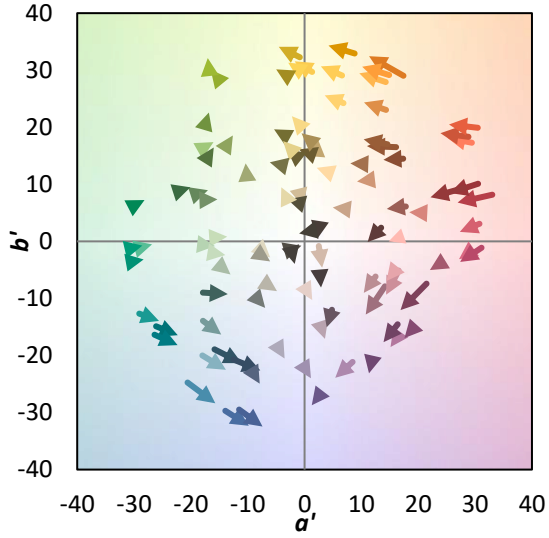


Color Vector Graphics







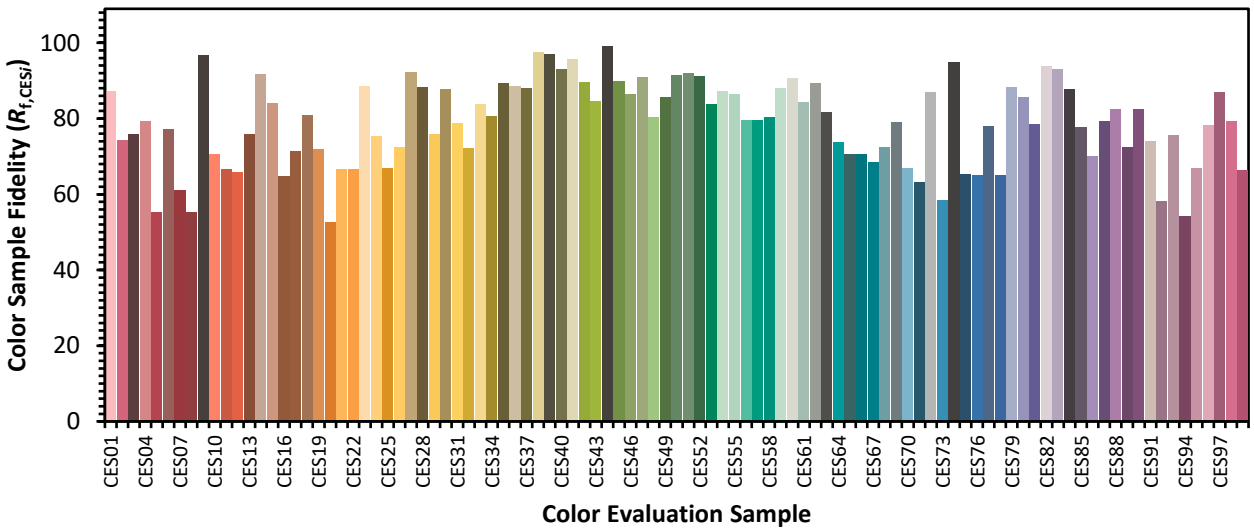


REPORT NUMBER: SP1-2501-332-11

TM-30-18

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

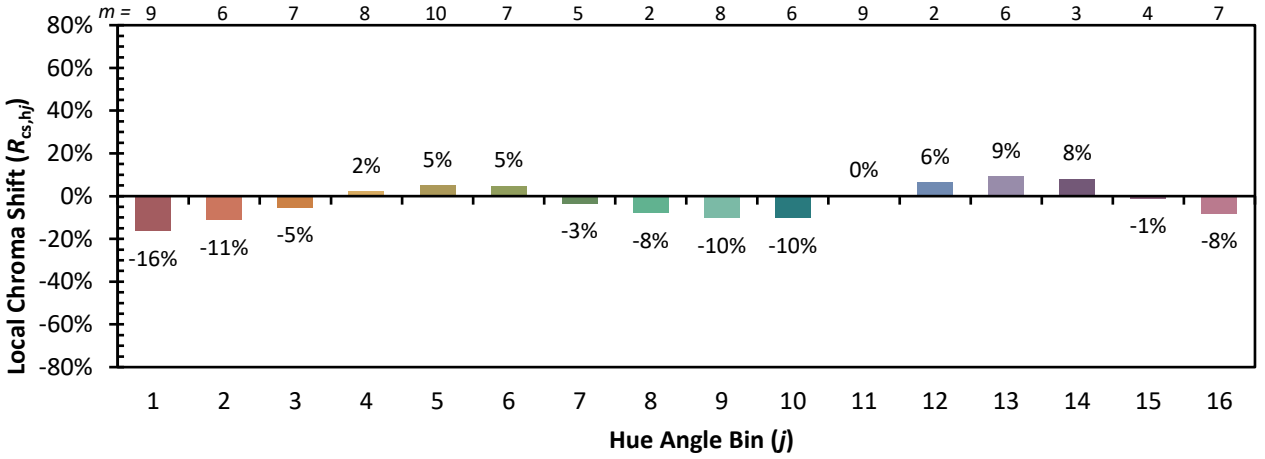
CES01 = 85	CES26 = 72	CES51 = 92	CES76 = 65
CES02 = 61	CES27 = 92	CES52 = 91	CES77 = 78
CES03 = 30	CES28 = 88	CES53 = 84	CES78 = 65
CES04 = 70	CES29 = 76	CES54 = 87	CES79 = 88
CES05 = 47	CES30 = 88	CES55 = 86	CES80 = 86
CES06 = 50	CES31 = 79	CES56 = 80	CES81 = 79
CES07 = 40	CES32 = 72	CES57 = 79	CES82 = 94
CES08 = 39	CES33 = 84	CES58 = 80	CES83 = 93
CES09 = 29	CES34 = 81	CES59 = 88	CES84 = 88
CES10 = 74	CES35 = 89	CES60 = 91	CES85 = 78
CES11 = 57	CES36 = 88	CES61 = 84	CES86 = 70
CES12 = 63	CES37 = 88	CES62 = 89	CES87 = 79
CES13 = 42	CES38 = 98	CES63 = 82	CES88 = 82
CES14 = 74	CES39 = 97	CES64 = 74	CES89 = 72
CES15 = 71	CES40 = 93	CES65 = 71	CES90 = 83
CES16 = 46	CES41 = 96	CES66 = 71	CES91 = 74
CES17 = 49	CES42 = 90	CES67 = 68	CES92 = 58
CES18 = 56	CES43 = 85	CES68 = 72	CES93 = 76
CES19 = 72	CES44 = 99	CES69 = 79	CES94 = 54
CES20 = 65	CES45 = 90	CES70 = 67	CES95 = 67
CES21 = 86	CES46 = 87	CES71 = 63	CES96 = 78
CES22 = 78	CES47 = 91	CES72 = 87	CES97 = 87
CES23 = 91	CES48 = 80	CES73 = 58	CES98 = 79
CES24 = 91	CES49 = 86	CES74 = 95	CES99 = 66
CES25 = 72	CES50 = 92	CES75 = 65	

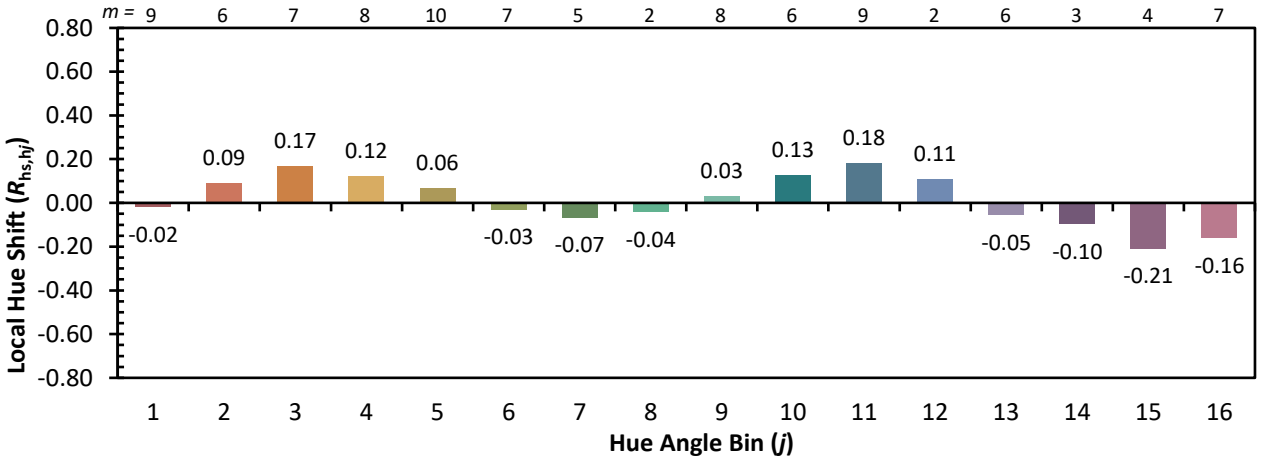


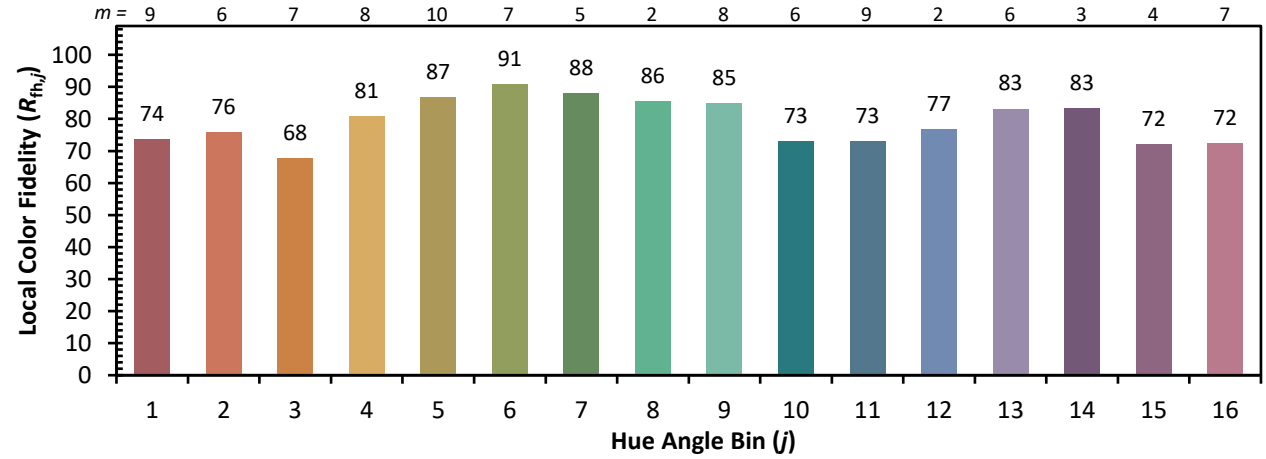
REPORT NUMBER: SP1-2501-332-11

TM-30-18

Color Rendition by Hue-Angle Bin



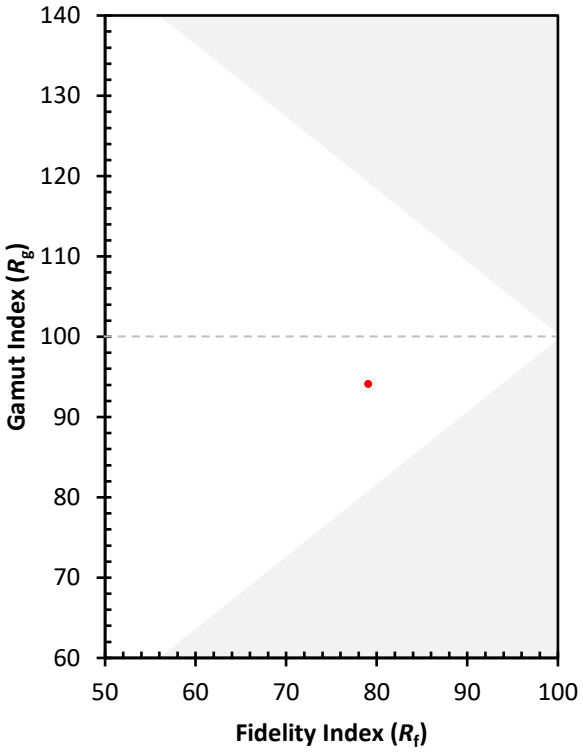


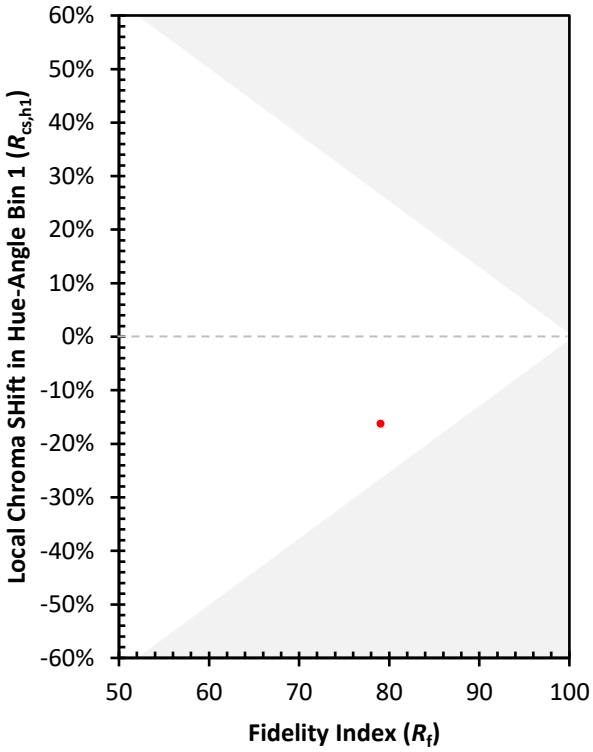


REPORT NUMBER: SP1-2501-332-11

TM-30-18

Measure Comparisons





(END OF REPORT)