

Signify Classified - Internal  
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: P856226

Luminaire Tested: **FFX-CLB-20-740-U-FR-T3-UPLR**

Issue Date: 07/16/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P856226  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 07/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: FFX-CLB-20-740-U-FR-T3-UPLR  
Description: FAIRFAX POST TOP FIXTURE w/ FAIRFAX REFRACTOR T3 DISTRIBUTION LENS AND UPLIGHT REFLECTOR  
Light Source: (4) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

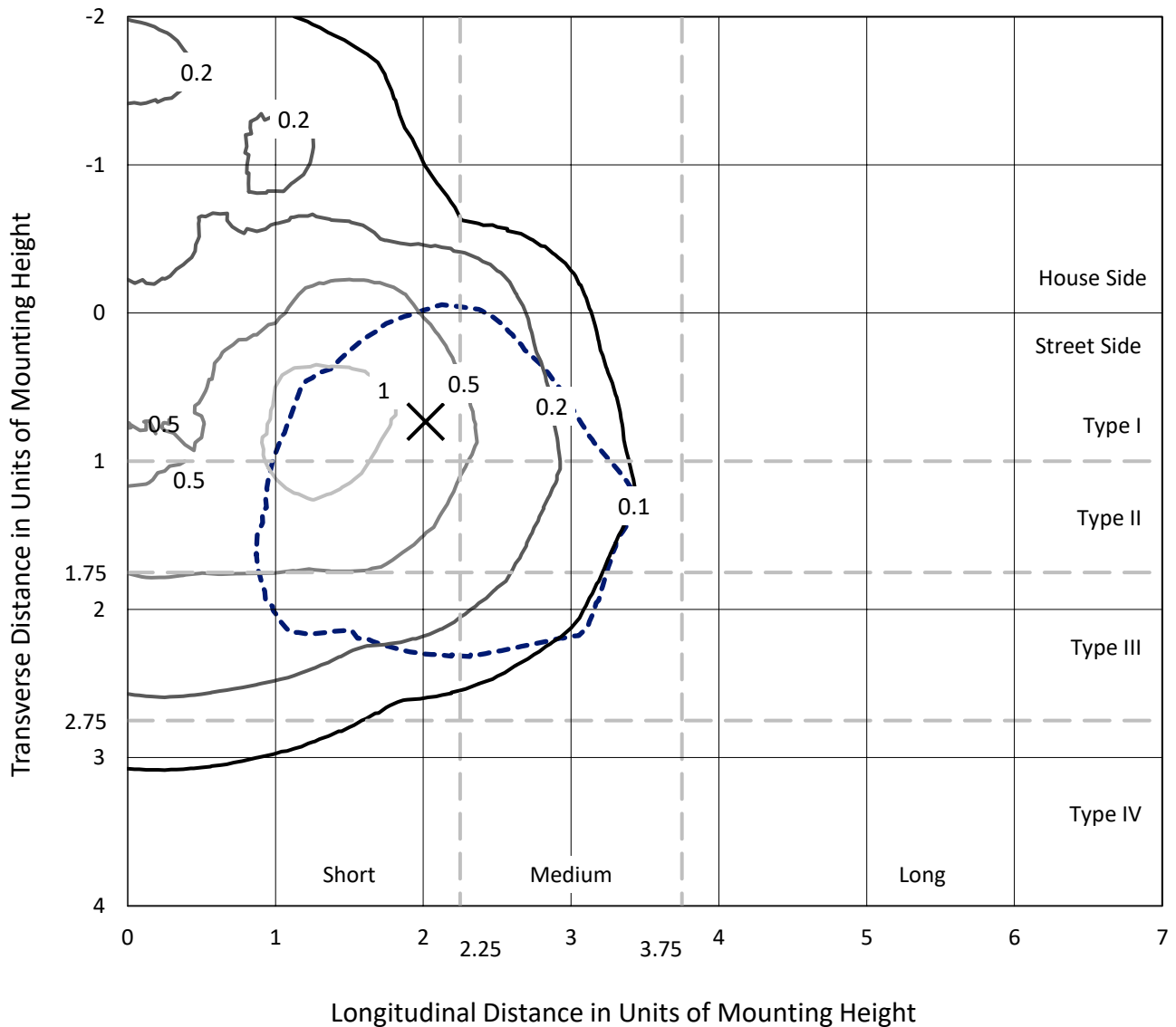
Lumens per Lamp: N/A  
Luminaire Lumens: 3185.4 lumens  
Efficiency: N/A  
Efficacy: 163.4 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 1.67')  
IES Classification: Type III - Short  
BUG Rating: B1 - U3 - G2

Input Watts (W): 19.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 9.8%%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P856226  
 CATALOG NUMBER: FFX-CLB-20-740-U-FR-T3-UPLR

### Iso-Footcandle Lines of Horizontal Illumination

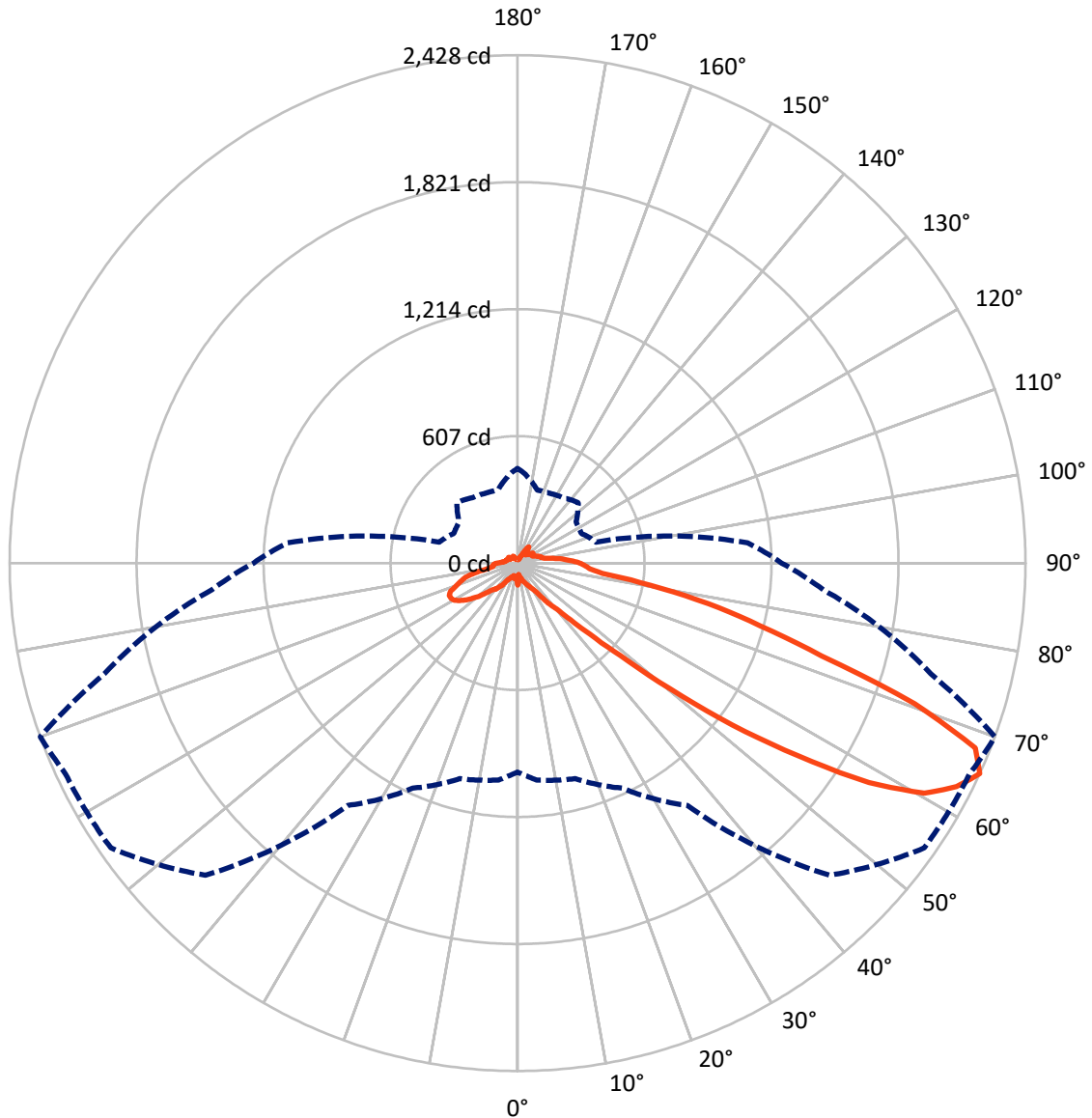
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.4 fc  
 Type III - Short - N/A

REPORT NUMBER: P856226  
CATALOG NUMBER: FFX-CLB-20-740-U-FR-T3-UPLR

### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P856226  
 CATALOG NUMBER: FFX-CLB-20-740-U-FR-T3-UPLR

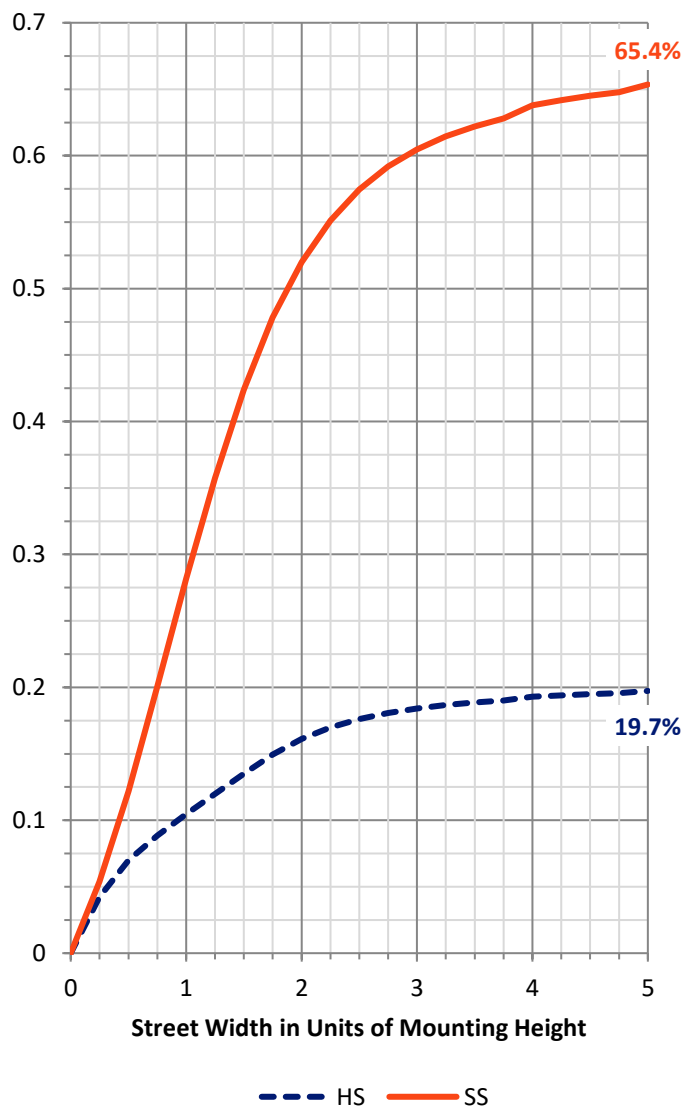
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	653.3	122.4	775.7
	% Fixture	20.5	3.8	24.4
<b>Street Side</b>	Lumens	2154.4	255.3	2409.7
	% Fixture	67.6	8.0	75.6
<b>Total</b>	Lumens	2807.7	377.7	3185.4
	% Fixture	88.1	11.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	6.8	0.2
10°-20°	21.3	0.7
20°-30°	43.0	1.3
30°-40°	91.0	2.9
40°-50°	212.1	6.7
50°-60°	632.2	19.8
60°-70°	1013.0	31.8
70°-80°	581.9	18.3
80°-90°	206.4	6.5
90°-100°	121.7	3.8
100°-110°	73.5	2.3
110°-120°	55.3	1.7
120°-130°	46.8	1.5
130°-140°	31.1	1.0
140°-150°	29.2	0.9
150°-160°	12.9	0.4
160°-170°	5.4	0.2
170°-180°	1.8	0.1
0°-90°	2807.7	88.1
0°-180°	3185.4	100.0



REPORT NUMBER: P856226

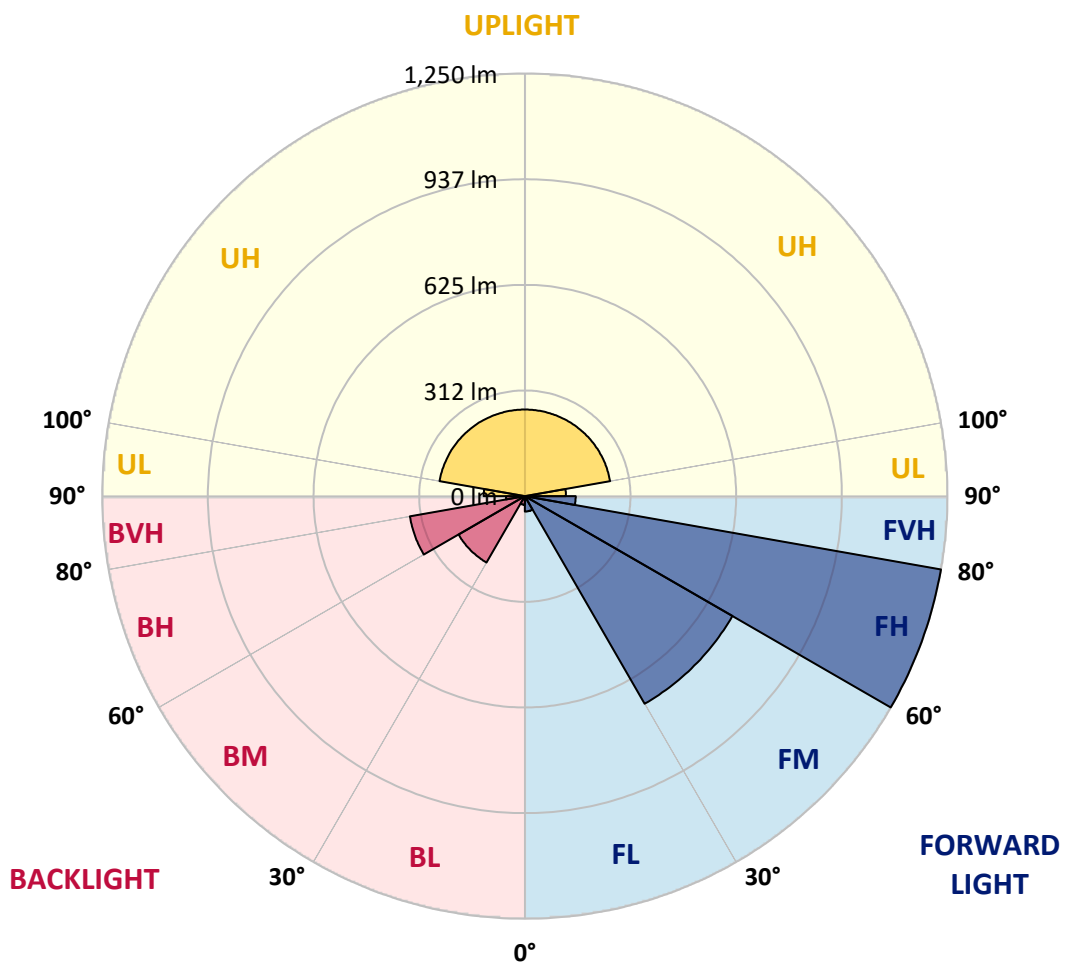
CATALOG NUMBER: FFX-CLB-20-740-U-FR-T3-UPLR

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	45.6	1.4			
FM (30°-60°)	708.8	22.3			
FH (60°-80°)	1249.6	39.2			G1/1800
FVH (80°-90°)	150.3	4.7			G2/225
BL (0°-30°)	25.5	0.8	B0/110		
BM (30°-60°)	226.5	7.1	B1/1000		
BH (60°-80°)	345.3	10.8	B1/500		G1/500
BVH (80°-90°)	56.0	1.8			G1/100
UL (90°-100°)	121.7	3.8		U3/500	
UH (100°-180°)	256.0	8.0		U3/500	

**BUG Rating: B1-U3-G2**

Type III Short





REPORT NUMBER: P856226

CATALOG NUMBER: FFX-CLB-20-740-U-FR-T3-UPLR

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7
2.5°	88.1	87.4	89.1	90.5	92.2	89.8	85.7	89.8	91.1	95.2	98.2
5°	74.9	75.3	77.0	80.7	84.1	83.4	72.9	59.4	55.4	53.7	54.0
7.5°	74.3	73.9	72.9	72.6	74.6	82.0	81.0	71.2	63.8	57.4	51.0
10°	78.3	79.3	80.3	80.3	79.0	74.3	73.9	73.3	70.6	67.5	63.5
12.5°	96.9	98.2	99.3	95.9	91.5	86.8	83.0	77.0	74.3	72.6	69.5
15°	117.1	118.5	116.8	110.4	102.6	93.8	90.5	90.8	87.1	82.7	76.3
17.5°	127.9	127.3	120.2	112.8	106.7	99.9	95.2	92.2	90.8	89.1	82.7
20°	121.2	119.5	115.1	112.1	111.4	107.7	104.7	102.0	100.3	96.6	88.8
22.5°	116.1	116.1	115.5	114.8	118.8	117.1	115.8	112.1	109.7	105.0	93.5
25°	122.5	122.5	122.9	121.9	127.3	127.3	127.3	123.2	120.2	113.4	99.6
27.5°	131.7	131.3	132.3	131.7	136.4	137.4	139.4	136.4	132.0	123.9	106.3
30°	141.4	141.4	142.5	143.1	147.9	150.2	152.6	151.2	145.8	136.0	117.8
32.5°	151.9	151.6	154.6	158.0	160.7	165.1	166.1	169.5	164.1	152.6	134.7
35°	167.1	168.1	176.2	183.3	191.1	193.8	198.5	211.7	206.3	190.7	170.1
37.5°	241.7	236.6	234.6	226.5	225.5	241.4	247.1	259.6	248.8	227.9	196.5
40°	256.2	250.2	247.5	239.7	242.4	275.1	269.4	314.3	288.0	254.5	234.3
42.5°	241.4	240.4	272.1	278.2	274.8	326.8	315.6	398.7	370.7	293.0	270.4
45°	291.3	288.6	302.1	312.9	321.4	414.9	408.1	495.6	483.4	356.8	334.5
47.5°	328.8	326.1	341.6	377.8	427.0	528.3	567.8	699.8	658.6	490.9	440.2
50°	440.9	439.2	481.1	519.9	601.2	750.8	859.2	1001.6	941.2	685.6	592.5
52.5°	546.9	552.3	601.2	675.9	761.9	1032.0	1186.6	1286.5	1285.9	892.9	760.6
55°	622.9	641.1	698.8	833.5	953.0	1281.5	1490.1	1564.0	1626.2	1191.3	926.3
57.5°	770.4	802.1	857.5	990.8	1145.1	1583.3	1881.0	1868.9	1980.6	1500.9	1106.6
60°	922.0	959.1	977.7	1100.2	1302.8	1874.0	2149.8	2121.4	2233.8	1770.3	1296.3
62.5°	969.2	1005.7	1023.9	1157.3	1416.5	2038.7	2273.7	2284.8	2354.7	1962.4	1408.8
65°	998.9	1040.8	1067.1	1187.3	1414.2	2110.6	2373.9	2384.4	2428.3	2045.1	1466.8
67.5°	993.5	1040.4	1074.2	1181.9	1335.8	2050.8	2348.9	2301.7	2360.4	1986.0	1405.7
70°	886.2	927.0	960.8	1043.8	1115.1	1727.8	2032.3	1954.3	2015.1	1659.2	1160.6
72.5°	724.1	741.0	770.4	809.5	845.0	1281.8	1550.2	1483.4	1518.5	1244.7	869.6
75°	594.8	591.5	617.8	646.1	635.0	936.5	1226.5	1165.4	1198.1	945.2	693.7
77.5°	440.9	439.2	477.3	475.0	458.1	648.5	972.3	928.0	932.4	698.1	519.5
80°	265.0	270.1	307.2	314.6	294.7	406.8	694.1	673.2	641.8	477.0	364.3
82.5°	186.0	193.8	213.4	221.5	211.7	297.1	459.8	445.3	408.1	346.0	256.6
85°	189.7	191.1	193.4	194.1	189.7	266.7	356.8	348.7	346.4	290.0	211.7
87.5°	189.7	192.8	194.8	194.5	186.7	249.8	329.1	316.3	319.4	271.1	204.6
90°	170.1	175.5	175.2	176.2	169.8	225.8	298.4	288.0	292.0	244.4	186.0
92.5°	139.1	142.8	146.5	153.6	144.2	192.1	252.2	242.4	247.5	208.0	158.3
95°	129.3	132.7	135.0	138.7	129.3	170.8	223.1	211.3	213.4	176.6	134.0
97.5°	104.7	106.7	109.4	110.1	103.3	131.3	169.8	159.7	161.0	137.1	105.3
100°	87.8	89.5	91.8	91.8	87.4	108.7	134.4	129.0	128.3	112.1	89.1
102.5°	83.0	83.7	87.4	86.8	82.4	100.3	121.5	118.2	118.5	104.0	83.7
105°	81.7	81.7	85.4	83.7	80.0	95.5	113.8	112.8	112.4	98.9	80.3
107.5°	80.3	80.3	84.1	82.4	79.3	90.1	107.0	103.6	103.3	94.2	76.0
110°	74.9	76.0	80.0	78.0	75.6	85.1	98.2	95.9	95.9	88.8	72.6



REPORT NUMBER: P856226

CATALOG NUMBER: FFX-CLB-20-740-U-FR-T3-UPLR

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
112.5°	66.5	67.2	70.9	69.2	67.5	75.6	87.1	84.1	84.4	79.7	67.9
115°	62.1	63.1	66.8	64.5	63.1	70.6	80.7	78.7	79.3	74.9	64.1
117.5°	62.5	62.8	65.5	65.8	63.1	69.2	74.6	75.3	76.3	73.6	65.2
120°	76.0	74.3	75.6	73.9	72.6	79.7	86.1	86.8	86.4	81.4	64.8
122.5°	76.6	73.3	77.0	74.6	73.3	81.0	88.1	89.8	88.1	83.7	66.2
125°	61.1	62.1	62.5	63.1	64.5	72.9	76.6	77.0	77.3	76.0	64.1
127.5°	53.7	53.3	51.7	52.0	55.0	62.5	65.2	67.2	65.8	65.2	57.7
130°	51.3	52.0	51.7	51.7	53.3	59.1	61.1	64.1	63.1	61.8	52.7
132.5°	47.3	47.9	51.0	54.7	54.0	56.0	56.7	59.8	60.1	60.1	53.0
135°	44.9	45.6	47.9	52.7	51.3	52.3	52.0	54.7	55.0	55.4	50.0
137.5°	45.9	46.2	44.9	45.6	46.6	51.0	52.3	55.0	55.0	53.7	46.6
140°	48.3	48.3	45.2	44.2	46.2	53.0	55.7	60.1	59.4	57.1	48.3
142.5°	44.6	45.2	46.9	49.0	53.3	71.9	71.9	80.3	83.0	83.7	58.4
145°	58.1	58.4	59.1	60.1	68.5	94.2	85.7	91.8	94.2	96.6	70.2
147.5°	66.8	67.5	66.8	64.1	71.9	80.7	76.6	79.3	82.0	82.7	70.6
150°	52.3	51.7	51.3	51.0	59.4	62.1	58.7	58.4	60.4	62.1	54.7
152.5°	38.1	37.8	37.5	37.1	44.6	42.9	40.5	40.5	41.2	41.5	38.5
155°	33.8	33.4	32.7	33.1	37.8	36.1	34.1	33.4	34.1	33.8	32.1
157.5°	27.7	27.0	27.0	28.4	30.7	28.7	27.3	26.3	26.7	26.3	26.7
160°	23.0	22.6	23.0	24.6	26.0	24.3	23.0	22.3	22.3	23.0	24.3
162.5°	20.6	20.3	20.6	21.3	21.9	20.3	19.2	19.2	19.6	20.9	23.6
165°	17.9	17.9	18.2	18.6	18.9	17.9	17.6	17.6	18.2	20.3	23.3
167.5°	17.2	17.2	17.2	17.2	17.2	16.9	16.5	17.6	18.2	19.2	21.3
170°	16.9	16.5	16.9	16.9	16.9	16.9	16.9	17.9	17.9	18.2	19.2
172.5°	17.2	17.2	17.2	17.6	18.2	18.6	18.2	18.9	18.6	18.6	18.6
175°	17.6	17.6	17.9	18.2	18.6	18.9	19.2	19.2	19.2	19.6	19.6
177.5°	17.6	17.6	17.9	18.2	18.6	17.9	17.2	16.9	16.5	16.5	16.5
180°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5





REPORT NUMBER: P856226

CATALOG NUMBER: FFX-CLB-20-740-U-FR-T3-UPLR

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7
2.5°	95.5	87.1	75.3	80.3	95.9	92.8	77.3	67.9	68.5	75.3	76.0
5°	55.7	57.4	65.2	81.4	84.4	69.9	56.4	54.4	65.5	81.0	84.1
7.5°	50.3	50.3	56.7	79.0	88.8	72.9	55.0	49.6	58.1	70.9	72.9
10°	60.8	58.7	59.4	67.5	71.2	58.4	49.3	46.9	51.7	53.3	52.7
12.5°	68.5	69.9	76.3	74.6	58.4	47.6	44.6	44.2	46.9	48.6	48.3
15°	73.6	71.2	66.5	61.1	55.7	49.6	45.2	42.5	39.5	38.1	38.1
17.5°	78.3	73.6	65.2	60.1	54.7	50.3	46.2	42.2	40.8	41.2	41.2
20°	84.1	78.3	70.6	64.8	58.4	52.3	47.3	42.9	41.9	42.2	41.9
22.5°	88.4	83.4	75.3	67.9	61.1	54.4	49.3	44.9	43.5	43.2	43.2
25°	93.8	89.5	81.0	71.9	63.8	57.4	53.0	47.9	45.6	44.9	44.9
27.5°	100.9	97.2	87.8	78.0	68.5	61.1	56.4	51.0	47.6	46.2	45.9
30°	111.7	106.7	96.2	84.1	74.3	66.5	60.8	54.0	50.0	47.6	47.3
32.5°	127.9	121.5	107.7	92.5	80.7	72.6	65.5	57.1	52.0	49.3	49.0
35°	162.4	155.3	137.7	116.5	99.3	82.7	71.6	60.4	54.0	50.6	50.3
37.5°	184.0	171.2	149.9	130.6	109.7	99.9	85.7	70.9	56.7	52.3	51.7
40°	215.4	198.8	172.2	146.2	109.4	109.0	99.6	86.4	66.8	55.4	54.4
42.5°	238.7	217.4	184.0	155.0	110.4	113.4	105.3	93.8	79.3	64.5	62.8
45°	286.3	259.3	206.3	162.7	111.7	118.5	110.4	98.2	85.4	74.9	73.9
47.5°	375.4	337.9	249.5	177.6	126.9	135.4	120.9	106.7	94.2	83.7	81.4
50°	500.0	455.1	301.8	190.7	152.9	172.2	148.5	126.9	112.1	104.0	101.6
52.5°	646.1	595.8	334.5	211.3	184.3	217.4	191.4	166.1	146.5	147.9	146.5
55°	809.2	749.8	363.2	242.4	224.5	267.7	239.3	217.4	206.9	236.3	238.0
57.5°	966.5	903.0	381.1	275.1	269.4	325.8	292.7	277.2	281.2	367.3	387.6
60°	1116.7	1016.5	395.0	305.9	307.2	371.3	346.0	343.0	355.5	465.9	496.6
62.5°	1203.5	1074.5	394.3	325.8	330.8	399.4	377.1	378.8	388.2	482.1	507.7
65°	1262.6	1103.9	387.6	335.9	341.0	409.5	380.8	367.6	361.6	425.7	453.0
67.5°	1227.1	1047.2	371.3	327.1	333.9	393.3	357.5	324.4	314.0	348.7	364.9
70°	1037.4	875.0	330.8	297.4	301.8	331.8	301.5	265.3	254.9	273.1	280.5
72.5°	783.9	671.8	296.7	274.8	264.3	274.5	244.8	206.9	204.6	214.4	215.7
75°	626.2	527.3	270.4	247.8	219.8	230.2	194.5	153.9	150.9	151.6	148.2
77.5°	471.9	392.3	227.5	195.1	166.4	183.6	144.5	106.3	101.3	99.3	95.5
80°	323.1	272.4	154.6	130.6	118.2	134.7	103.0	78.0	77.6	77.0	72.9
82.5°	229.2	210.3	126.3	111.1	100.3	106.0	89.5	72.9	71.2	71.6	67.2
85°	200.5	190.4	121.9	112.4	102.0	101.6	85.4	68.2	67.5	67.9	63.8
87.5°	191.8	180.6	119.2	107.4	97.2	92.2	75.3	60.1	61.8	62.8	59.1
90°	171.8	160.4	108.0	95.9	86.1	77.3	63.8	54.4	57.1	57.7	54.4
92.5°	144.8	133.0	84.1	77.0	72.2	70.9	59.8	51.7	53.7	54.0	51.3
95°	122.5	111.7	73.3	67.9	64.5	64.1	54.0	46.9	47.9	47.6	45.2
97.5°	98.6	90.8	64.1	59.1	55.4	53.3	46.2	40.8	42.2	42.9	41.2
100°	84.1	79.7	59.8	55.4	51.0	48.3	42.2	37.8	39.2	40.5	39.2
102.5°	79.0	75.6	58.7	54.0	49.3	45.9	40.2	35.4	36.1	37.8	36.8
105°	74.9	71.9	57.1	52.0	47.6	43.9	39.2	33.4	33.1	34.8	34.4
107.5°	70.6	67.9	56.0	50.0	45.2	41.9	37.5	32.1	30.7	31.7	31.4
110°	68.2	65.5	54.0	47.6	42.5	39.5	35.4	31.1	29.4	29.7	29.7



REPORT NUMBER: P856226

CATALOG NUMBER: FFX-CLB-20-740-U-FR-T3-UPLR

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	63.5	60.4	49.6	43.5	39.5	36.8	32.7	29.7	27.7	28.4	28.7
115°	60.4	56.4	45.6	41.2	36.8	34.4	32.1	29.4	27.0	27.0	27.3
117.5°	62.5	54.7	42.5	39.2	36.8	36.1	35.4	31.4	26.7	26.3	26.3
120°	59.8	55.0	46.2	45.2	42.9	40.8	36.5	31.1	26.0	25.3	25.3
122.5°	58.4	57.4	52.3	49.0	44.6	40.5	34.1	28.4	25.0	24.3	24.3
125°	57.7	56.7	50.6	44.2	38.5	34.4	30.4	26.7	24.6	23.6	23.6
127.5°	53.0	48.3	40.8	37.1	33.4	31.7	28.4	26.0	23.6	22.3	22.3
130°	49.0	44.6	38.1	34.1	31.1	29.7	27.3	25.0	22.6	21.3	20.9
132.5°	48.3	43.9	37.1	32.1	29.4	28.0	26.7	24.0	21.3	19.9	19.6
135°	44.9	39.8	33.1	30.4	28.7	27.7	26.7	23.3	20.6	19.2	19.2
137.5°	41.5	36.5	31.4	30.0	28.7	27.7	24.6	21.3	19.2	18.2	18.2
140°	41.9	36.1	32.1	31.1	29.0	26.0	23.3	20.9	19.2	17.9	17.6
142.5°	44.6	37.5	32.4	29.4	28.0	26.3	25.3	22.6	19.2	16.9	16.2
145°	49.0	40.5	36.5	35.1	32.7	29.7	26.0	20.9	17.6	15.5	15.2
147.5°	54.0	45.6	40.8	37.1	32.4	27.3	22.3	18.2	15.5	14.9	14.5
150°	46.9	38.8	35.1	30.0	26.0	21.9	18.2	16.2	14.9	14.5	14.5
152.5°	35.4	29.0	26.0	23.6	21.3	19.2	17.2	15.9	14.9	14.2	14.2
155°	30.7	27.3	24.3	21.9	19.6	17.6	15.9	15.2	14.2	14.2	13.8
157.5°	27.0	25.3	21.3	19.2	17.6	16.5	15.9	14.9	14.5	14.2	14.2
160°	24.6	23.6	19.6	17.9	16.9	16.2	16.2	15.5	14.5	14.2	14.2
162.5°	24.0	23.0	18.9	17.2	16.2	16.5	17.2	16.9	15.5	14.9	14.9
165°	23.6	23.0	19.2	16.9	16.2	16.5	18.2	18.6	16.9	15.9	15.5
167.5°	21.6	21.3	20.3	18.6	17.6	17.6	18.6	18.9	18.2	18.2	17.9
170°	19.6	19.6	19.9	20.3	19.6	18.6	17.9	17.9	18.9	19.9	20.3
172.5°	18.9	19.2	19.9	20.9	20.9	19.6	18.6	18.2	19.2	20.6	20.9
175°	19.9	20.3	20.6	20.6	19.9	19.6	19.2	18.9	19.6	20.9	21.3
177.5°	16.5	16.5	16.9	16.9	16.5	16.9	16.5	15.9	15.9	15.9	15.9
180°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2406-133-1

Test Date: 07/11/2024

Luminaire Tested: FFX-CLB-100-740-U-FR-T5

Data in this report applies to families of products including FFX-CLB-100-740-U-FR-T5.

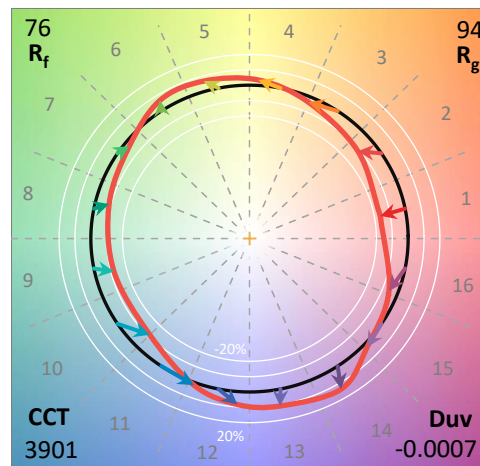
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2406-133-1  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 07/12/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **FFX-CLB-100-740-U-FR-T5**  
 Description: FAIRFAX ACORN W/ FAIRFAX REFRACTOR 100W T5

**Spectral Parameters**

CCT (K): 3901  
 CIE u': 0.2273  
 CIE v': 0.5026  
 Duv: -0.0007  
 CIE x: 0.3844  
 CIE y: 0.3776  
 CIE z: 0.2380  
 Peak Wavelength (nm): 451  
 Dominant Wavelength (nm): 579  
 Purity: 28.6799  
 Rf: 76.2  
 Rg: 94.4

CRI (Ra):	74.5		
R1:	71.8	R9:	-23.4
R2:	81.9	R10:	56.6
R3:	89.3	R11:	68.4
R4:	72.6	R12:	46.6
R5:	71.3	R13:	73.7
R6:	74.0	R14:	93.9
R7:	81.5	R15:	65.1
R8:	53.3		



**Test Conditions**

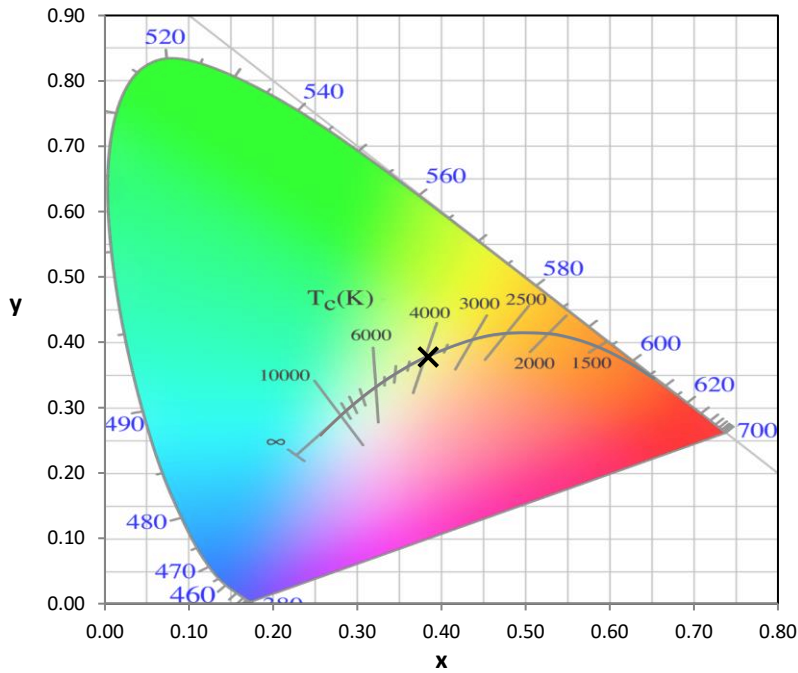
Stabilization Time: 0.818109M  
 Operation Time: 1H  
 Sphere Temperature (°C): 24.6

REPORT NUMBER: SP1-2406-133-1

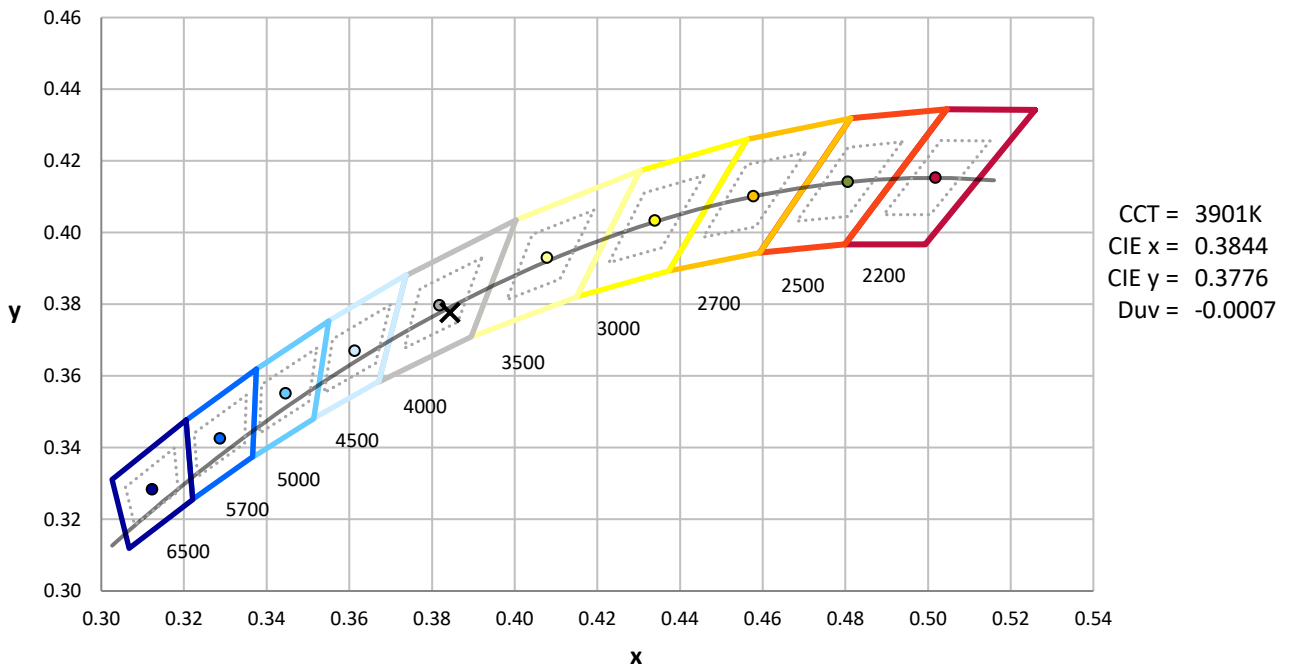
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2406-133-1

CIE 1931 Chromaticity Diagram



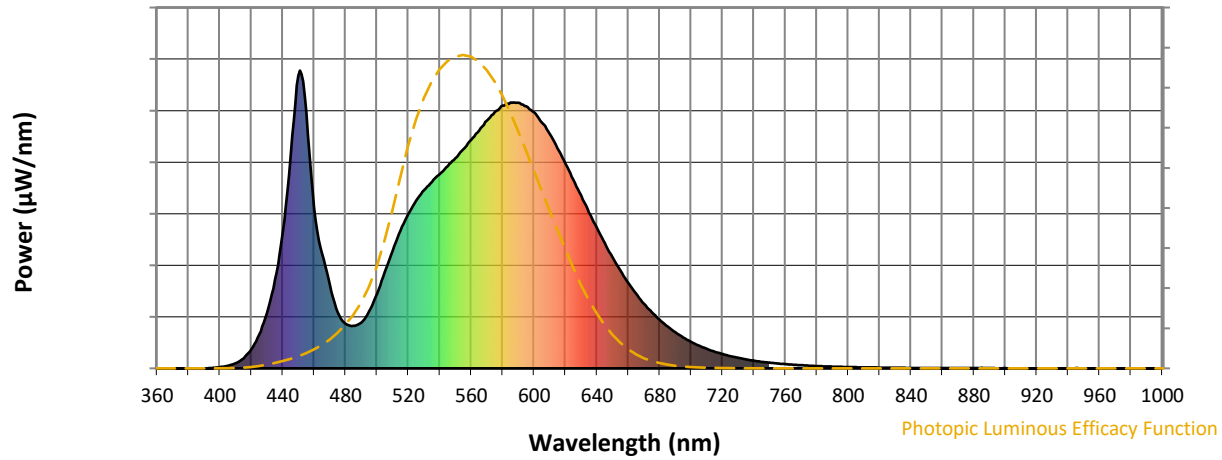
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2406-133-1

**Photopic Flux vs. Wavelength**

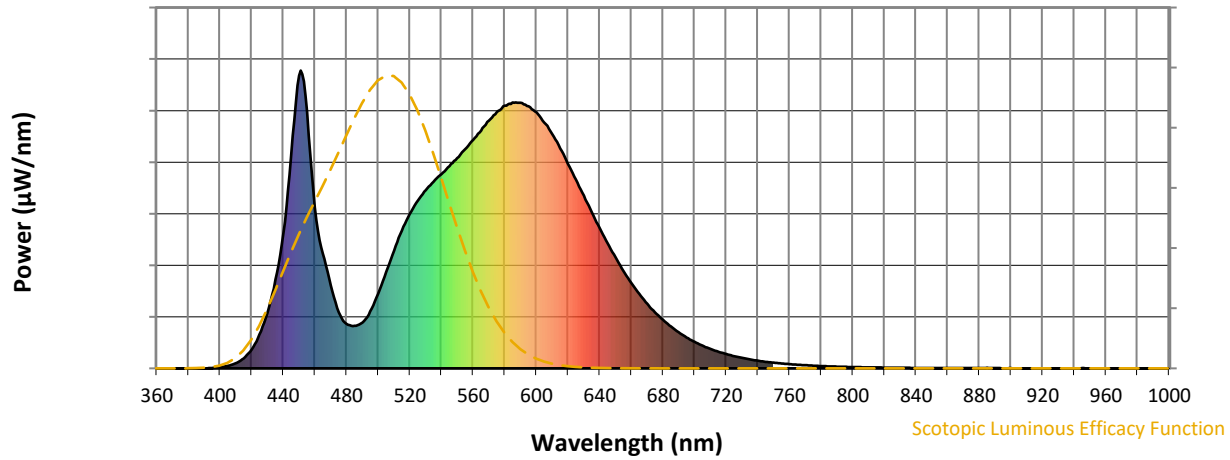


**Photopic Lumens: NR**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	154	NR	620	687	NR	750	19	NR	880	1	NR
365	0	NR	495	191	NR	625	634	NR	755	17	NR	885	2	NR
370	0	NR	500	251	NR	630	581	NR	760	14	NR	890	1	NR
375	0	NR	505	323	NR	635	524	NR	765	12	NR	895	0	NR
380	0	NR	510	395	NR	640	471	NR	770	11	NR	900	1	NR
385	0	NR	515	462	NR	645	420	NR	775	9	NR	905	0	NR
390	0	NR	520	520	NR	650	373	NR	780	8	NR	910	0	NR
395	1	NR	525	563	NR	655	328	NR	785	7	NR	915	0	NR
400	4	NR	530	599	NR	660	286	NR	790	6	NR	920	0	NR
405	8	NR	535	627	NR	665	250	NR	795	5	NR	925	0	NR
410	17	NR	540	653	NR	670	217	NR	800	4	NR	930	0	NR
415	34	NR	545	679	NR	675	188	NR	805	4	NR	935	0	NR
420	63	NR	550	706	NR	680	163	NR	810	3	NR	940	0	NR
425	114	NR	555	737	NR	685	140	NR	815	3	NR	945	1	NR
430	186	NR	560	768	NR	690	121	NR	820	3	NR	950	0	NR
435	297	NR	565	798	NR	695	104	NR	825	2	NR	955	0	NR
440	454	NR	570	831	NR	700	89	NR	830	2	NR	960	0	NR
445	713	NR	575	860	NR	705	77	NR	835	2	NR	965	0	NR
450	983	NR	580	882	NR	710	65	NR	840	2	NR	970	0	NR
455	861	NR	585	893	NR	715	56	NR	845	1	NR	975	0	NR
460	540	NR	590	892	NR	720	48	NR	850	1	NR	980	0	NR
465	386	NR	595	880	NR	725	41	NR	855	1	NR	985	0	NR
470	279	NR	600	859	NR	730	35	NR	860	1	NR	990	0	NR
475	188	NR	605	825	NR	735	30	NR	865	1	NR	995	0	NR
480	149	NR	610	787	NR	740	26	NR	870	1	NR	1000	0	NR
485	143	NR	615	738	NR	745	22	NR	875	1	NR			

REPORT NUMBER: SP1-2406-133-1

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

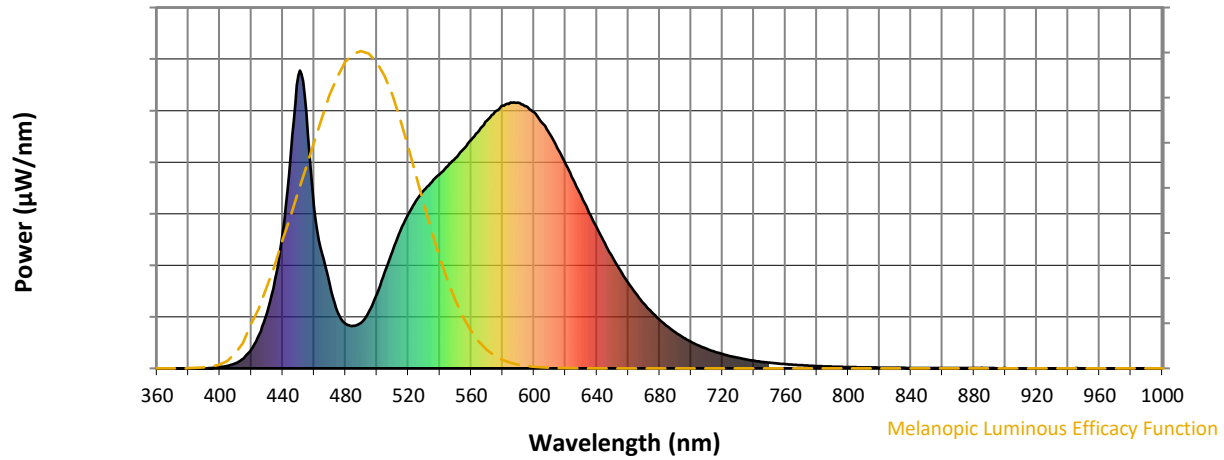
**S/P: 1.53**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	154	NR	620	687	NR	750	19	NR	880	1	NR
365	0	NR	495	191	NR	625	634	NR	755	17	NR	885	2	NR
370	0	NR	500	251	NR	630	581	NR	760	14	NR	890	1	NR
375	0	NR	505	323	NR	635	524	NR	765	12	NR	895	0	NR
380	0	NR	510	395	NR	640	471	NR	770	11	NR	900	1	NR
385	0	NR	515	462	NR	645	420	NR	775	9	NR	905	0	NR
390	0	NR	520	520	NR	650	373	NR	780	8	NR	910	0	NR
395	1	NR	525	563	NR	655	328	NR	785	7	NR	915	0	NR
400	4	NR	530	599	NR	660	286	NR	790	6	NR	920	0	NR
405	8	NR	535	627	NR	665	250	NR	795	5	NR	925	0	NR
410	17	NR	540	653	NR	670	217	NR	800	4	NR	930	0	NR
415	34	NR	545	679	NR	675	188	NR	805	4	NR	935	0	NR
420	63	NR	550	706	NR	680	163	NR	810	3	NR	940	0	NR
425	114	NR	555	737	NR	685	140	NR	815	3	NR	945	1	NR
430	186	NR	560	768	NR	690	121	NR	820	3	NR	950	0	NR
435	297	NR	565	798	NR	695	104	NR	825	2	NR	955	0	NR
440	454	NR	570	831	NR	700	89	NR	830	2	NR	960	0	NR
445	713	NR	575	860	NR	705	77	NR	835	2	NR	965	0	NR
450	983	NR	580	882	NR	710	65	NR	840	2	NR	970	0	NR
455	861	NR	585	893	NR	715	56	NR	845	1	NR	975	0	NR
460	540	NR	590	892	NR	720	48	NR	850	1	NR	980	0	NR
465	386	NR	595	880	NR	725	41	NR	855	1	NR	985	0	NR
470	279	NR	600	859	NR	730	35	NR	860	1	NR	990	0	NR
475	188	NR	605	825	NR	735	30	NR	865	1	NR	995	0	NR
480	149	NR	610	787	NR	740	26	NR	870	1	NR	1000	0	NR
485	143	NR	615	738	NR	745	22	NR	875	1	NR			



REPORT NUMBER: SP1-2406-133-1

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.04

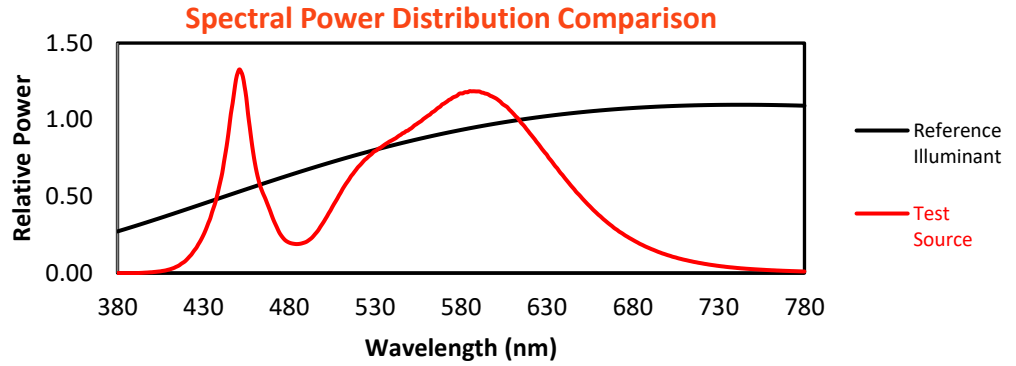
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	154	NR	620	687	NR	750	19	NR	880	1	NR
365	0	NR	495	191	NR	625	634	NR	755	17	NR	885	2	NR
370	0	NR	500	251	NR	630	581	NR	760	14	NR	890	1	NR
375	0	NR	505	323	NR	635	524	NR	765	12	NR	895	0	NR
380	0	NR	510	395	NR	640	471	NR	770	11	NR	900	1	NR
385	0	NR	515	462	NR	645	420	NR	775	9	NR	905	0	NR
390	0	NR	520	520	NR	650	373	NR	780	8	NR	910	0	NR
395	1	NR	525	563	NR	655	328	NR	785	7	NR	915	0	NR
400	4	NR	530	599	NR	660	286	NR	790	6	NR	920	0	NR
405	8	NR	535	627	NR	665	250	NR	795	5	NR	925	0	NR
410	17	NR	540	653	NR	670	217	NR	800	4	NR	930	0	NR
415	34	NR	545	679	NR	675	188	NR	805	4	NR	935	0	NR
420	63	NR	550	706	NR	680	163	NR	810	3	NR	940	0	NR
425	114	NR	555	737	NR	685	140	NR	815	3	NR	945	1	NR
430	186	NR	560	768	NR	690	121	NR	820	3	NR	950	0	NR
435	297	NR	565	798	NR	695	104	NR	825	2	NR	955	0	NR
440	454	NR	570	831	NR	700	89	NR	830	2	NR	960	0	NR
445	713	NR	575	860	NR	705	77	NR	835	2	NR	965	0	NR
450	983	NR	580	882	NR	710	65	NR	840	2	NR	970	0	NR
455	861	NR	585	893	NR	715	56	NR	845	1	NR	975	0	NR
460	540	NR	590	892	NR	720	48	NR	850	1	NR	980	0	NR
465	386	NR	595	880	NR	725	41	NR	855	1	NR	985	0	NR
470	279	NR	600	859	NR	730	35	NR	860	1	NR	990	0	NR
475	188	NR	605	825	NR	735	30	NR	865	1	NR	995	0	NR
480	149	NR	610	787	NR	740	26	NR	870	1	NR	1000	0	NR
485	143	NR	615	738	NR	745	22	NR	875	1	NR			

REPORT NUMBER: SP1-2406-133-1

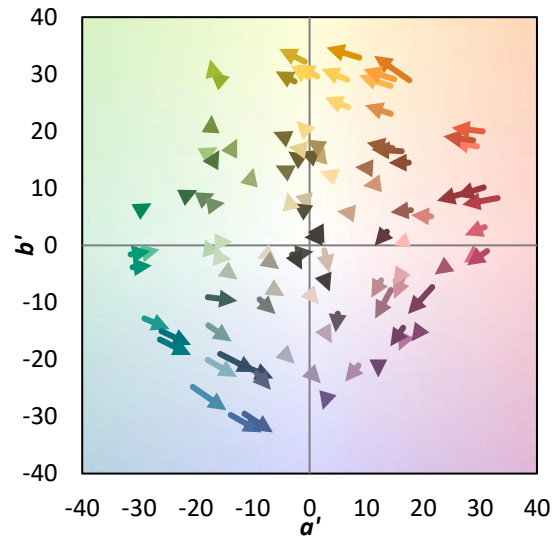
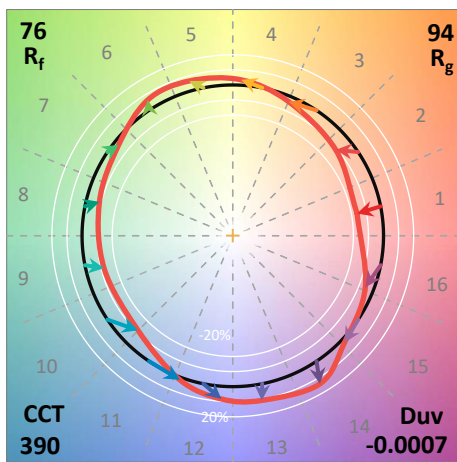
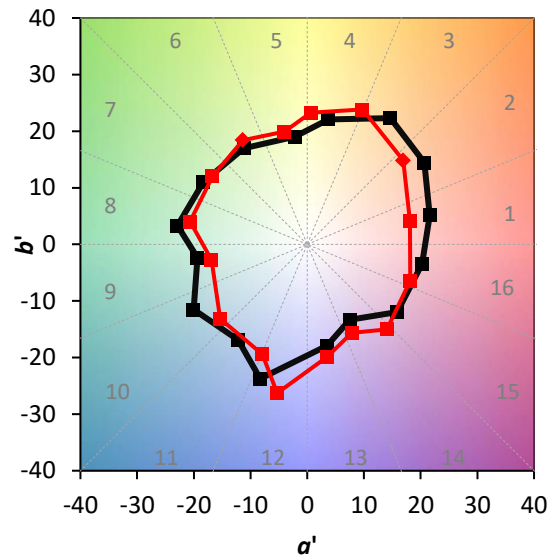
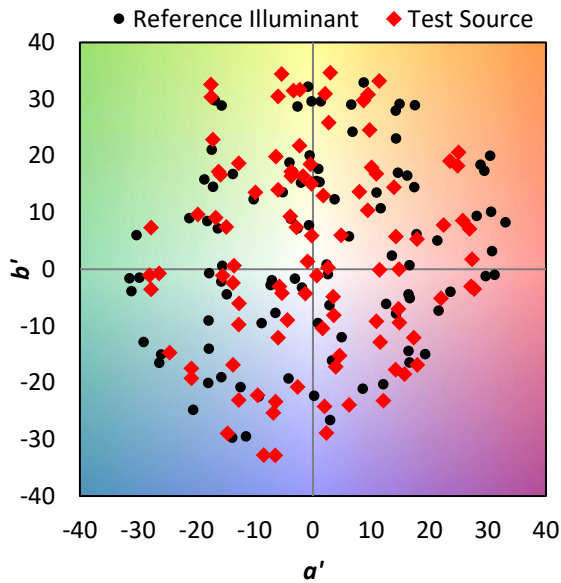
TM-30-18

**Summary**

$R_f = 76.2$   
 $R_g = 94.4$   
 CIE  $R_a = 74.5$   
 $R_g = -23.4$



**Color Vector Graphics**

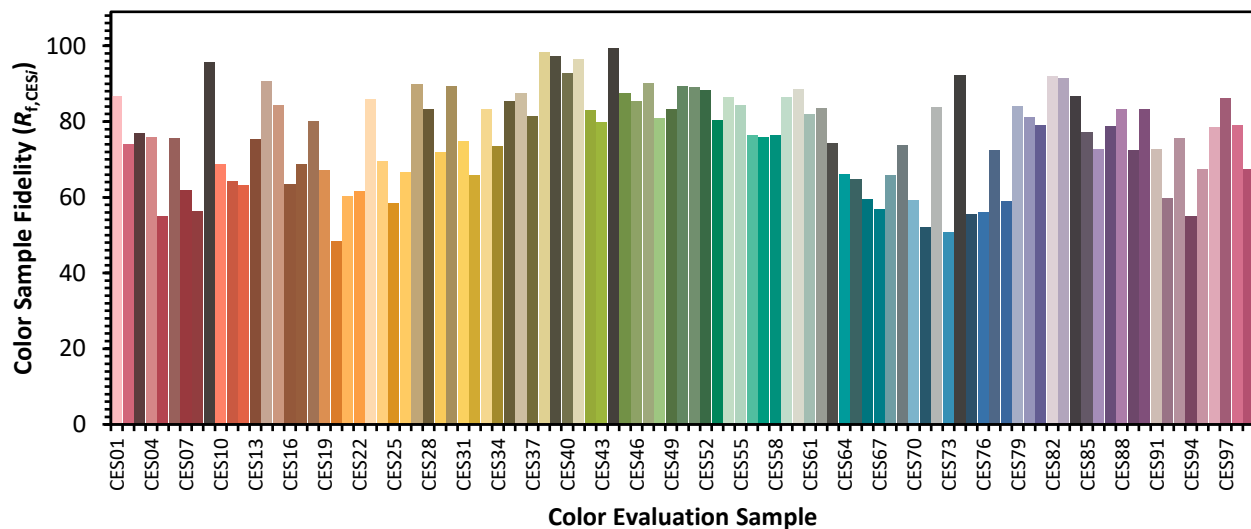


REPORT NUMBER: SP1-2406-133-1

TM-30-18

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

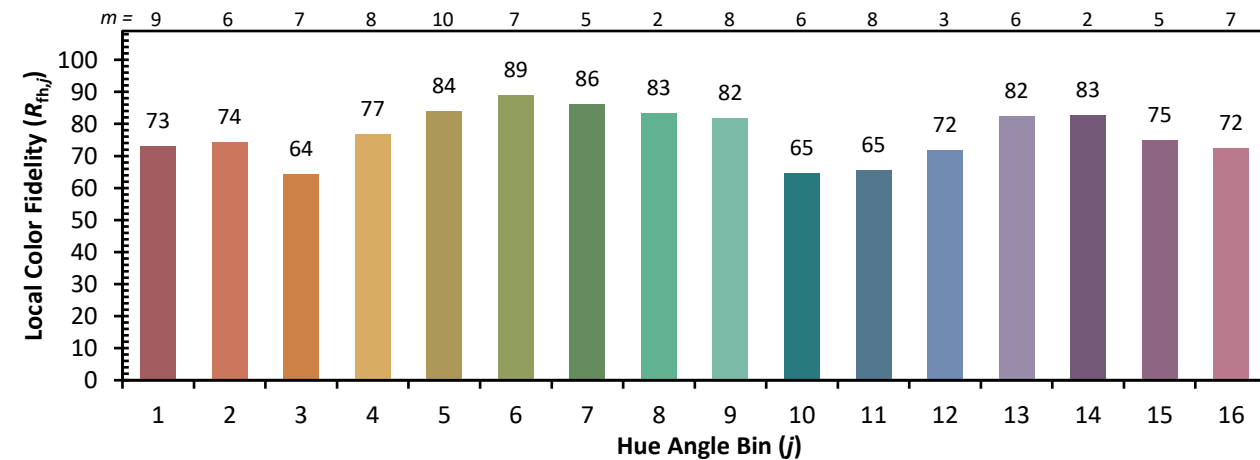
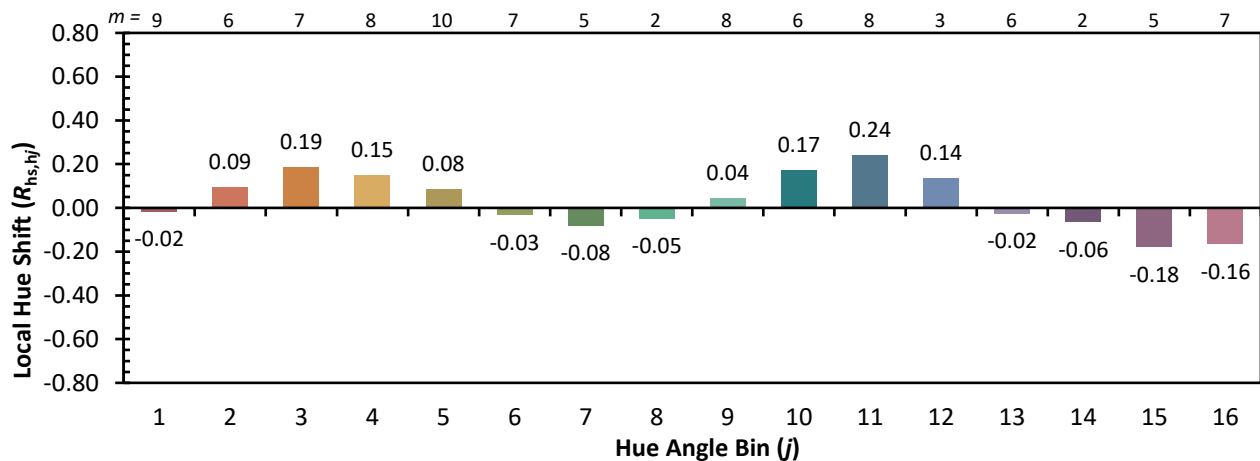
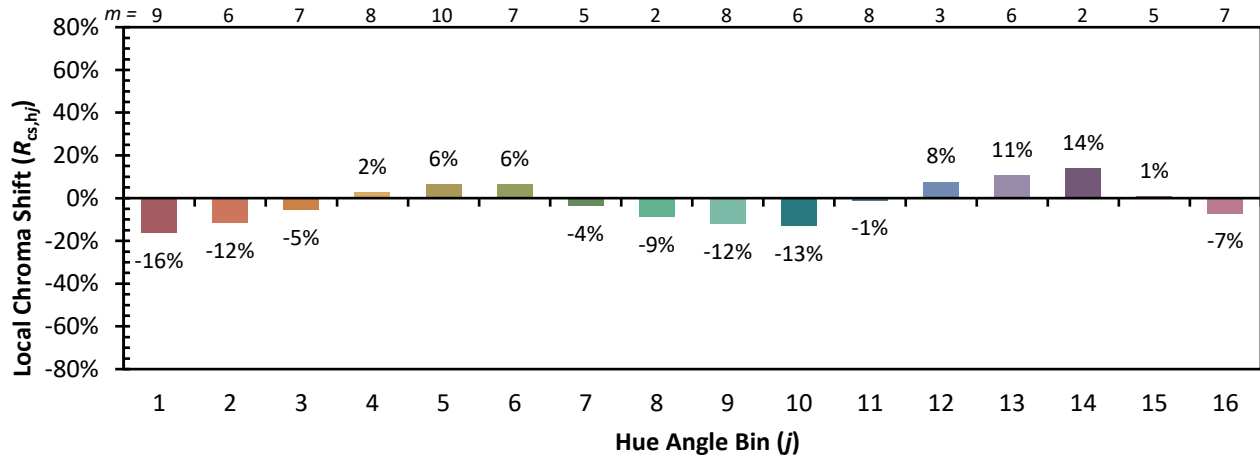
CES01 = 85	CES26 = 67	CES51 = 89	CES76 = 56
CES02 = 61	CES27 = 90	CES52 = 88	CES77 = 72
CES03 = 30	CES28 = 83	CES53 = 80	CES78 = 59
CES04 = 70	CES29 = 72	CES54 = 86	CES79 = 84
CES05 = 48	CES30 = 89	CES55 = 84	CES80 = 81
CES06 = 51	CES31 = 75	CES56 = 77	CES81 = 79
CES07 = 40	CES32 = 66	CES57 = 76	CES82 = 92
CES08 = 39	CES33 = 83	CES58 = 76	CES83 = 92
CES09 = 29	CES34 = 74	CES59 = 86	CES84 = 87
CES10 = 74	CES35 = 85	CES60 = 89	CES85 = 77
CES11 = 57	CES36 = 87	CES61 = 82	CES86 = 73
CES12 = 63	CES37 = 81	CES62 = 84	CES87 = 79
CES13 = 42	CES38 = 98	CES63 = 74	CES88 = 83
CES14 = 74	CES39 = 97	CES64 = 66	CES89 = 72
CES15 = 71	CES40 = 93	CES65 = 65	CES90 = 83
CES16 = 46	CES41 = 96	CES66 = 59	CES91 = 73
CES17 = 49	CES42 = 83	CES67 = 57	CES92 = 60
CES18 = 56	CES43 = 80	CES68 = 66	CES93 = 75
CES19 = 72	CES44 = 99	CES69 = 74	CES94 = 55
CES20 = 65	CES45 = 87	CES70 = 59	CES95 = 67
CES21 = 86	CES46 = 85	CES71 = 52	CES96 = 78
CES22 = 78	CES47 = 90	CES72 = 84	CES97 = 86
CES23 = 92	CES48 = 81	CES73 = 51	CES98 = 79
CES24 = 91	CES49 = 83	CES74 = 92	CES99 = 68
CES25 = 72	CES50 = 89	CES75 = 56	



REPORT NUMBER: SP1-2406-133-1

TM-30-18

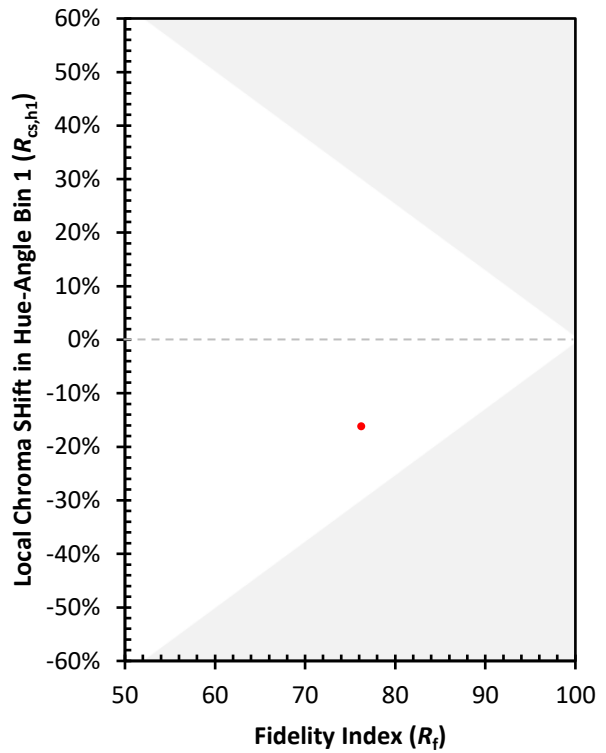
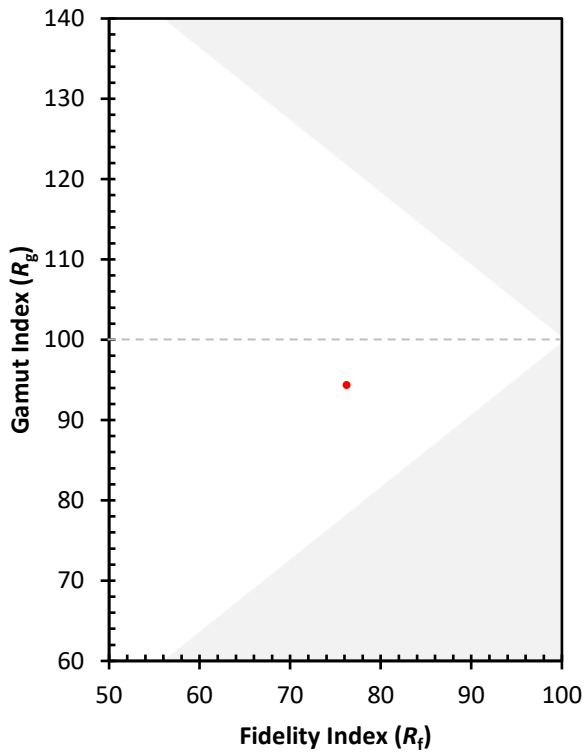
Color Rendition by Hue-Angle Bin



REPORT NUMBER: SP1-2406-133-1

TM-30-18

Measure Comparisons



(END OF REPORT)